A Panorama of Scientific Research at Bar-Ilan University

Office of the Vice President for Research and Development
The pages that follow in this impressive Panorama of Research book offer a glimpse into the far-reaching spectrum of research activity undertaken by the scholars and scientists of Bar-Ilan University, and also reflect not only the diverse interests of these faculty members, but also, the demographic diversity of the community itself. Senior and junior academes, new immigrants and native Israelis, men and women, returning scientists and local-bred ones - all these have, in their confluence, contributed to the remarkable scientific output of Bar-Ilan University.

It’s an apt opportunity to point to the sea-change that has been taking place in BIU’s academic composition, particularly as it has reflected significantly on the quality and quantity of research being produced at the University. Originally established as a largely liberal arts institution with Jewish Studies, Humanities, Law and Social Sciences as the majority partner, over the past decade there have been concerted efforts to shift the balance between the arts and sciences to allow for a more equitable division between the two. With the addition of Engineering and Medical faculties together with the Exact and Life Sciences, we now are beginning to see the fruits of this policy change in the significant increase in external research funding.

Particularly exciting is the close collaboration forged between the different disciplines through inter- and multi-disciplinary research. So it can be seen in the hallways and labs of the Gonda Brain Research Center and the Gonda Nanotechnology Complex. These two initiatives allowed the University to provide laboratories to the best and brightest researchers recruited from the most prestigious universities around the world. The University’s commitment to not only absorb these new faculty members, but also provide them with state-of-the-art equipment, start-up funding as well as technicians, has resulted in a meteoric rise in research incomes.

Bar-Ilan University’s focus on faculty development can also be seen in the human sciences, enhancing the range of research being conducted, the number of prizes and awards being bestowed on faculty, and helping to create an intellectual culture that is producing the next generation of scholars.

The Panorama of Research book is intended to open up the BIU research “DNA” to potential collaborations with scientists and scholars from other universities. This is indeed a targeted effort to significantly expand our global academic outreach, increase the number of submissions to major granting agencies, and in general, advance our efforts to create new dynamic partnerships with colleagues and institutions in Israel and abroad.

I invite you to peruse these pages with that goal in mind, and join with us as we strive to reach new horizons in research.

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Prof. Benjamin Ehrenberg
Vice President for Research
Department of Chemistry

Prof. Amnon Albeck
Synthetic chemistry, peptides, peptidomimetics, enzyme mechanism, enzyme inhibition, drug design, computational biochemistry.

Prof. Doron Aurbach
General, electrochemical, surface & materials science. Development of novel power sources: rechargeable batteries - Li, Mg, Na and Pb based (including Li-air & Li-sulfur batteries); super-capacitors; batteries for electrical propulsion (including Al-air primary batteries), small batteries for portable sensors, batteries for sustainable energy storage & conversion. Water treatments by electrochemical means: electrodes development and engineering of full devices for water desalination & purifications. Development of novel in-situ spectro-electrochemical tools.
Equipment: - electrochemical measurements by multi-channel computerized systems; Impedance, FTIR & Raman spectroscopies, XPS, solid-state NMR; surface analysis by gas adsorption; electrochemical quartz crystal microbalance & admittance and microscopy, including surface conductivity measurements; thermal analysis by DSC, accelerating rate calorimeter and thermo-gravimetric analysis; tunneling electron microscopy both regular and high resolution, elements analysis by ICP.

Dr. Laurent Benisvy
Coordination chemistry of redox-active phenol-containing ligands, as: (a) chemical models of tyrosyl radical enzymes, (b) water-soluble copper and iron chelators for therapeutic applications, (c) building blocks for the construction of switchable metal-organic-frameworks (MOFs). Coordination chemistry, bio-inspired catalysis, chelators.
Equipment: - Cary 5000 UV/vis/NIR spectrophotometer; Biologic electrochemistry workstation; Nicolet iS10 FT-IR spectrometer with ZnSe ATR accessory.

Prof. Gerardo Byk
Novel biocompatible nanoparticles for live cell and in vivo applications for imaging, cell tracking, targeting, and diagnostics. We use confocal and florescence microscopy as well as physico-chemical tools such as TEM, zeta sizer, NMR thermogravimetry.

Dr. Jordan Chill
We study the structure, dynamics and function of proteins, folded and unstructured, with applications for structure-guided drug design and employing high-resolution NMR. Specific projects include: interaction of potassium channels with ligands and inhibitors and formation of the E1/E2 glycoprotein complex needed for hepatitis C virus infectivity.
Equipment: Nuclear magnetic resonance spectrometer-700 MHz equipped with cryoprobe; protein expression and purification facility - from gene to sample.
Dr. Lior Elbaz  
Electrochemistry; electrocatalysis of oxygen reduction and hydrogen oxidation; design and synthesis of transition metal complexes; ceramic catalysts supports; functionalized carbons; bio-inspired catalytic systems; electron transfer mechanisms; fuel cells; metal-air batteries; solar cells; capacitors.

Prof. Bilha Fischer  
Medicinal chemistry, nucleotide chemistry, drug development, diagnostic probes, Alzheimer’s disease, inflammatory bowel diseases, osteoarthritis, glaucoma. Expertise in nucleotide, dinucleotide, oligonucleotide synthesis, ectonucleotidases, nucleotide receptors, and fluorescent probes.

Prof. Aryeh Frimer  
Active oxygen chemistry within liposomal bilayers and biomembranes.

Prof. Aharon Gedanken  
Antibacterial, antiviral and antifungal nanoparticles; sonochemical deposition of nanoparticles on surfaces; DNA and RNA nanospheres and their application for gene expression and gene silencing; conversion of biomass to biofuels.  
Equipment: - TGA and DSC; reflection spectrometer; IR spectrometer; microwave ovens; sonicators of powers at 600-2500 W; roll to roll sonochemical coating machine.

Dr. Gil Goobes  
Protein structure; protein adsorption; biomineralization; biophysics of mineralized tissue; DNA structure; biomaterial research; advanced battery materials.  
Equipment: - Solid state NMR, isothermal titration calorimetry, adsorption and surface characterization, recombinant protein expression, synthesis of proteins and peptides.

Dr. Arie Gruzman  
Diabetes, ALS, prostate cancer, cardiac arrhythmia, Alzheimer’s disease.

Prof. Alfred Hassner  
Development of new carbon-carbon bond forming reactions in organic chemistry.  
Heterocyclic chemistry. Anti-cancer agents.

Prof. Shmaryahu Hoz  
Reaction mechanism and the role of additives in the chemistry of SmI2; computational chemistry on mechanical properties of basic engineering elements.

Prof. Kenneth Kay  
Semiclassical approximations for molecular dynamics and electronic structure of atoms, applications to wave packet tunneling.

Prof. Jean Paul Lelouche  
Functional magnetic nanoparticles, photoreactive processes, gene silencing by nanoscale functional materials, conducting polymers, surface derivatizations/functionalization methods (UV photoreactive ligands and nanoparticles), catalysts particles.  
Equipment: - Renishaw Raman spectrophotometer, TGA/DSC devices, DLS and zeta sizer instruments, FTIR/UV spectrophotometers, lyophilizers, high power ultrasonicators for synthesis and NP fabrication, high speed and T controlled centrifuge devices, heat plates and orbital shakers.

Prof. Shlomo Margel  
Synthesis and characterization of functional nanoparticles for industrial and medical applications; nanobiotechnology for cancer and neurodegenerative disorders diagnosis and therapy; elemental Fe nano/micro-particles for water treatment (heavy metals and organic pollutants removal); new adsorbents for CO2.

Prof. Yitzhak Mastai  
Chirality at the nanoscale, with a focus on preparation and application of nano chiral surfaces for enantioselective process. Chiral self-assembled monolayers (SAMs) for the preparation of chiral nanosurfaces for chiral resolution by crystallization. Chiral ordered mesoporous silica by chiral polymer-templated synthesis.

Prof. Dan Major  
Computational chemistry, enzyme simulations, Li-ion battery simulations, oxide simulations.  
Equipment: - 36-node computer cluster (> 300 cores).

Dr. Gilbert Nessim  
Synthesis of nanostructures for energy applications focusing on carbon-based 1-D (carbon nanotubes and carbon nanofibers) and 2-D (carbon nanofiber cloths, graphene) structures. Uncovering new growth mechanisms of these nanostructures for future high-performance battery and super-capacitor electrodes.  
Equipment: - sophisticated plasma-enhanced chemical vapor deposition system with vacuum, inverse plasma, and multiple pre-heating systems; The group’s expertise is in the science of thin films, catalysis of carbon nanostructures and chemical vapor deposition.
**Prof. Avraham Nudelman**


**Dr. Shai Rahimipour**

Combinatorial chemistry, peptide chemistry, neurodegeneration, misfolded proteins, peptidomimetics, biophysical and biochemical studies, in vitro studies, mechanistic studies, bioactive nano- and micro-capsules. 

Equipment: - automated 96-well peptide synthesizer, HPLC purification systems, a biohazard hood, a CO2 incubator, centrifuges, inverted fluorescent microscope, a plate reader with UV/vis and fluorimeter-based capabilities.

**Dr. Sharon Ruthstein**

Structural biology, biophysics, exploring the transportation mechanism of copper ions and heme in cells. 

Equipment: - pulsed X- and Q-band E580 elexsys electron paramagnetic spectroscopy. Expression and purification of proteins, synthesizing of peptides, HPLC, PCR, site directed mutagenesis and spin labeling.

**Dr. Adi Salomon**

Optical properties of metallic nanostructures and their interaction with molecules. These nanostructures can enhance and confine the light energy to a very small area (nanoscale) and are used as photonic catalysts to enhance and direct chemical and biological reactions.

**Prof. Hanoch Senderowitz**

Development, implementation and application of new computational methods for drug design. Modeling the structure, dynamics and mode of action of pharmaceutically relevant bio-targets and their ligands. Designing new ligands and predicting their pharmacological profile. 

Equipment: - computational cluster (~200 cores); molecular modeling software (Discovery Studio, Material Studio, Schrodinger, GROMACS, NAMD, AUTODOCK, utility program). Expertise in molecular modeling, computational chemistry, molecular simulations, computer-aided drug design, chemoinformatics, QSAR, QSPR.

**Dr. Hagay Shpaisman**

Influencing polymerization & phase separation processes with holographic optical tweezers; developing bubble based acousto-driven microfluidics; advancing light controlled microfluidics; creating position sensitive micro structures via digital microfluidics 

Equipment: - scanning confocal Raman microscope; holographic optical tweezers setup
Department of Chemistry

Departmental Equipment:
5 NMR machines (200, 300, 400, 500, 600, and 700 MHz + cryoprobe; used for solution or solid state measurements)
3 MS machines (ESI, MALDI)
3 ESR machines (used for solution or solid state measurements)
Raman machine
FT-IR
XRD
SEM
ICP
XPS
DSC
AFM
Elemental analysis

Department of Computer Science

Dr. Noa Agmon
Multi-robot systems, including multi-robot patrolling, robot navigation and multi-agent planning in adversarial environments, ad-hoc teamwork.

Prof. Amihood Amir
Pattern matching algorithms, computational biology, knowledge discovery in databases, real-time systems algorithms.

Prof. Yonatan Aumann
Algorithms, pattern matching, computational biology, cryptography, data and text mining, parametrized complexity.

Prof. Ido Dagan
Natural language processing, computational linguistics, machine learning, information retrieval - search engines, text categorization, information extraction.

Prof. Dov Gabbay
Logic, logic and law, decision theory, talmudic logic.

Dr. Yoav Goldberg
Natural language processing and computational linguistics, improved parsing and tagging algorithms, Hebrew parsing, applied machine learning.

Dr. Ariel Frank
Internet resources discovery, digital libraries and search engines; distributed/distance education; networked/distributed multimedia; operating/distributed systems.

Dr. Avinatan Hassidim
Algorithms, game theory, quantum computing, approximation algorithms.

Prof. Amir Herzberg
Cryptography, network security, secure electronic commerce, secure usability, software security, network protocols, distributed algorithms, inter-vehicular networking, fault tolerance.

Prof. Gal Kaminka
Teams of robots, agents and people, data mining and learning, multi-agent systems, AI.

Dr. Tali Kaufman
Sub-linear algorithms and property testing, coding theory, graph theory, randomness in computation, approximation algorithms, combinatorics and additive combinatorics, complexity theory.
Department of Computer Science

Prof. Shmuel T. Klein  
Data compression, information retrieval, text processing, algorithms.

Prof. Moshe Koppel  
Machine learning, text categorization, authorship attribution.

Prof. Sarit Kraus  
Artificial Intelligence, multi-agent systems, negotiation and cooperation among agents, personalization, optimization of complex systems, electronic commerce, security of databases and systems, non-classical logics.

Prof. Moshe Lewenstein  
Algorithms, pattern matching, data structures, approximation algorithms.

Prof. Yehuda Lindell  
Theory of cryptography, secure multiparty computation.

Prof. Nathan Netanyahu  
Algorithm design + analysis, computational geometry, image processing + pattern recognition; robust estimation; remote sensing.

Prof. Doron Peled  
Concurrency theory, formal verification, formal specification, semantics of programming languages, model checking, finite automata, software testing, temporal logics, partial order methods and traces.

Prof. Benny Pinkas  
Design and analysis of solutions to applied security problems using the methods of the theory of cryptography, with a focus on secure multi-party computation. (cryptography computer and communications security privacy).

Prof. Ely Porat  
Design and analysis of algorithms, pattern matching, data compression, algorithms for massive data sets, approximation algorithms, data structures, automata theory, complexity, combinatorics, the probabilistic method.

Dr. Liam Roditty  
Graph algorithms, computational geometry, dynamic algorithms, algorithms for wireless networks.

Dr. David Sarne  
Autonomous agents and multi-agent systems, intelligent interfaces for human-computer interaction, large scale simulation systems, mechanism design and e-commerce.

Department of Mathematics

Prof. Ron Adin  
Algebraic combinatorics.

Prof. Mark Agranovsky  
Complex analysis, harmonic analysis, integral geometry.

Dr. Gideon Amir  
Probability theory – with an emphasis on random walks, interacting particle systems and random graphs.

Dr. Gil Ariel  
Dynamical systems with multiple time scales, mathematical biology.

Dr. Tatiana Bandman  
Algebraic geometry, complex analysis.

Dr. Jonathan Beck  
Quantum groups, mathematical physics.

Prof. Reuven Cohen  
Complex networks, graph theory, probability, complexity, discrete geometry.

Prof. Kenneth Hochberg  
Probability, stochastic processes and their applications, superprocesses, measure-valued stochastic processes, stochastic processes of higher-order and their connection to partial differential equations.

Dr. Simcha Horowitz  
Complex analysis, especially spaces of analytic functions.

Prof. Mikhail Katz  
Differential geometry, Riemannian geometry, low-dimensional topology, Riemann surfaces, mathematics education, history of mathematics, infinitesimals.

Prof. Ziv Kizner  
Fluid dynamics: vortex dynamics, stability and transitions; mathematical modelling in marine biology and ecology.

Dr. Yakov Krasnov  
Qualitative theory of partial differential equations, complex and hypercomplex analysis, numerical methods.

Dr. Boris Kunyavski  
Algebraic geometry, algebraic groups (including computational problems and applications in coding theory and public-key cryptography).
### Department of Mathematics

<table>
<thead>
<tr>
<th>Professor</th>
<th>Specialization</th>
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<tbody>
<tr>
<td>Prof. Andrei Lerner</td>
<td>Real analysis, harmonic analysis.</td>
</tr>
<tr>
<td>Dr. Mordechay Levin</td>
<td>Probabilistic diophantine approximation, applications of number theory to numerical analysis.</td>
</tr>
<tr>
<td>Dr. Elijah Liflyand</td>
<td>Harmonic analysis, approximation theory, functions of several complex variables.</td>
</tr>
<tr>
<td>Prof. Yoram Louzoun</td>
<td>Mathematical biology, bioinformatics, graph theory, stochastic processes, machine learning.</td>
</tr>
<tr>
<td>Prof. Stuart Margolis</td>
<td>Representation theory, semigroups, theory of automata, formal languages, computational algebra, combinatorial group theory, computational complexity theory.</td>
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<tr>
<td>Dr. Michael Megrel</td>
<td>Groups of topological transformation and applications to functional analysis.</td>
</tr>
<tr>
<td>Prof. Ely Merzbach</td>
<td>Stochastic and spatial point processes, measure theory, martingales; random sets; statistical analysis of spatial point patterns and stochastic analysis.</td>
</tr>
<tr>
<td>Dr. Shahar Nevo</td>
<td>Complex analysis: normal families, operator theory: rational matrix valued functions.</td>
</tr>
<tr>
<td>Dr. Tahl Nowik</td>
<td>Low dimensional topology, immersions of surfaces, plane and spherical curves, knot diagrams.</td>
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<tr>
<td>Dr. Evgeny Plotkin</td>
<td>Algebra, linear groups.</td>
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<tr>
<td>Prof. Andre Reznikov</td>
<td>Number theory, automorphic functions, representation theory.</td>
</tr>
<tr>
<td>Prof. Yuval Roichman</td>
<td>Combinatorics, graph theory, representation theory, Coxeter groups.</td>
</tr>
<tr>
<td>Prof. Louis Rowen</td>
<td>Non-commutative algebra, finite dimensional division algebras and the structure theory of rings, tropical algebras.</td>
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<tr>
<td>Prof. Malka (Mary) Schaps</td>
<td>Modular group representations, representations of finite dimensional algebras, deformation theory, tilting theory, theoretical economics.</td>
</tr>
<tr>
<td>Dr. Michael Schein</td>
<td>Algebraic number theory, Galois representations.</td>
</tr>
<tr>
<td>Prof. Jeremy Schiff</td>
<td>Mathematical physics, differential equations, conformal field theory, integrable systems.</td>
</tr>
<tr>
<td>Prof. Steven Shnider</td>
<td>Lie and Hopf algebras, differential and symplectic geometry, algebraic theory of deformation of algebras, operads, quantum groups.</td>
</tr>
<tr>
<td>Dr. Leonid Shuster</td>
<td>Differential equations, differential operators, difference operators, asymptotical problems for differential equations and operators.</td>
</tr>
<tr>
<td>Prof. Gregory Soifer</td>
<td>Lie groups. Linear algebraic groups, discrete subgroups of Lie groups.</td>
</tr>
<tr>
<td>Prof. Mina Teicher</td>
<td>Algebraic geometry of curves and surfaces, line arrangements and fundamental groups, braid groups and cryptography, computer vision, mathematical models of brain activity and neural computation.</td>
</tr>
<tr>
<td>Dr. Shlomo Yanetz</td>
<td>Applied mathematics: mathematical modelling of industrial processes, optimization and numerical modellings in engineering and the medical sciences, applications of multiplicators of summability.</td>
</tr>
<tr>
<td>Prof. Uzi Vishne</td>
<td>Ring theory, division algebras.</td>
</tr>
<tr>
<td>Dr. Yaniv Zaks</td>
<td>Actuarial mathematics, capital allocation.</td>
</tr>
<tr>
<td>Prof. Lawrence Zalcman</td>
<td>Complex analysis and potential theory, especially the theory of normal families and the interaction of function theory with other branches of analysis.</td>
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</tbody>
</table>
Prof. Eli Barkai
Non-equilibrium statistical physics, weak ergodicity breaking, application to blinking quantum dots and other single molecule systems, diffusion of bio-molecules in a cell environment, cold atoms in optical traps, and infinite ergodic theory.

Prof. Richard Berkovits
Statistical mechanics and transport in meso- and nanosystems, physical properties of 2DEG, quantum dots and nanoparticle, Coulomb blockade and magnetization of restricted geometries, interaction effects in mesoscopic systems, persistent currents, quantum chaos and entanglement entropy, Weak localization and multiple scattering phenomena for classical waves and electrons, the optical Anderson transition, imaging in the multiple scattering regime.

Prof. Itzhack Dana
Classical and quantum chaos and transport, related topics in condensed-matter physics (Anderson localization, quantum Hall effect, topological insulators), and experimental realization of quantum-chaos phenomena, in particular those simulating condensed-matter effects.

Prof. Mordechai Deutsch
Intracellular spatiotemporal scattered, transmitted and fluorescence light measurements at an individual cell/cell-spheroid resolution within a population; construction of microstructured platforms for cell/spheroid retaining, growing, treatment and imaging for research in molecular physics, biophysics and medicine. Applications to cell-based high content and high throughput screening.

Prof. Moshe Deutsch
Experimental soft condensed matter physics, liquids, liquid surfaces, surface dynamics in liquids, thin films, multielectronic excitations in atoms, x-ray spectroscopy, x-ray radiography, perfect crystal x-ray optics, crystal nucleation and growth, applications of synchrotron radiation, mathematical methods in physics.

Prof. Benjamin Ehrenberg
Biophysics of biological membranes, electric potentials on biological membranes, photophysical processes in biological systems, interaction of quantum dots and Pdots with membranes and cells, photodynamic therapy of cancer. Equipment: absorption and fluorescence spectrometers, methodologies for preparation of liposomes, and nanoparticles, CW and pulsed lasers.

Prof. Leonid Feigel
Theoretical studies of superconductivity in high-temperature materials and other novel superconductor (critical fields, symmetry of the superconducting state, vortex pinning and creep, ac response). Electron properties in metals, metal-insulator transitions.

Prof. Valentin Freilikher
Transport and localization in periodic and random media, in particular, in graphene superlattices and metamaterials. Microwave remote sensing of soil moisture and subsurface objects.

Prof. Isaac Freund
Optical vortices, singular optics, random phase fields and singularities in optics, localization and light scattering.

Prof. Aviad Frydman
Magnetism.

Prof. Yuval Garini
Biophysics, single molecule experiments, DNA – protein interactions, the organization of the genome in the nucleus, dynamic processes in live cells, microscopy and spectroscopy; Single molecule measurements using tethered particle motion (TPM), single molecule FRET using the TCSPC method. Equipment: - confocal microscope for live-cell imaging, dynamic methods for live cells: FCS, FRAP, FLIM, CP, SPT.

Prof. Moshe Gitterman
Stochastic oscillator and pendulum, new type of Brownian motion, critical phenomena and phase transitions.

Dr. Yuri Kaganovskii
Mass transport and diffusion in solids, optical recording, chalcogenide glasses, laser written waveguides and gratings.

Dr. Beena Kalisky
Scanning SQUID microscopy; sensitive, local, non-invasive magnetic probes to study superconductivity, magnetism and biomagnetism at small length scales and low magnetic fields. Complex oxide interfaces: magnetism, transport, and superconductivity; high temperature superconductors: single vortex dynamics, local modulations in the superfluid density; magnetotactic bacteria – single cell magnetic imaging.

Prof. Ido Kanter
Nonlinear dynamics, chaotic lasers, physical random number generators, physics and information and communication theory, synchronization of neuronal circuits in-vitro.
Department of Physics

Prof. David Kessler
Theoretical statistical physics, applications to biological systems, dynamics of spatially extended systems, noise, population dynamics, pattern formation.

Dr. Lev Khaykovich
Laser cooling and trapping of neutral atoms, Bose-Einstein condensate, strongly and weakly interacting cold gases, universal few-body physics, matter-wave solutions.

Prof. Ziv Kizner
Geophysical fluid dynamics, rotating fluids, linear and nonlinear vortex stability, vortex breakdown.

Prof. Lior Klein
Spintronics, nanomagnetism, current-induced torques, magnetic oxides, magnetic sensors, magnetic memory, oxide interfaces.

Prof. Eugene Kogan
Magnetic interactions in graphene, symmetry analysis of energy bands in graphene and graphene-related materials and double exchange model.

Dr. Avi Peer
Quantum optics with broadband squeezed light, ultrabroad entangled photon pairs, frequency comb sources, precision Raman spectroscopy, ultrashort pulse formation and mode locking physics.

Prof. Yitzhak Rabin
Theoretical studies of nanopores, the nuclear pore complex, chromatin dynamics, DNA-protein interactions.

Prof. Dennis Rapaport
Molecular dynamics studies of supramolecular self-assembly and complex fluid flow; nanoscale dynamics; simulation of granular segregation; molecular dynamics methodology including GPU algorithm design; interactive simulation using animated computer graphics.

Prof. Michael Rosenbluh
Laser spectroscopy, nonlinear optics, nano-optics, laser chaos and synchronization.

Prof. Boris Shapiro
Theory of magnetism and superconductivity.

Department of Physics

Dr. Amos Sharoni
Phase transitions in correlated transition metal oxides, nanoscale and proximity electronic effects. Spintronics: lateral devices, and magnetic material fabrication and characteristics. Superconductor proximity effects. Controlling neuronal growth via morphological cues.

Equipment: - PVD, including e-beam, sputtering (reactive and other), PLD. Nanolithography. Characterization: magneto-transport measurements. Scanning probe microscopy, XRD.

Prof. Efrat Shimshoni
Theory of strongly correlated electron systems, collective behavior in quantum phases and quantum criticality, transport phenomena in low-dimensional systems: superconductivity in thin films and wires; superconductor-insulator transitions; spin, charge and heat transport in low-dimensional magnetic systems; quantum Hall effect in graphene.

Prof. Nadav Shnerb
Physics of complex systems, stochastic population and community dynamics, fluctuations scaling, applications to biological systems – ecology, genetics and evolution, pattern formation, synchronization, quenched disorder.

Dr. Sharon Shwartz
Quantum optics, biphotons generation and manipulation, nonlinear phenomena at x-ray energies, quantum optics in the x-ray regime.

Dr. Eli Sloutskin
Phase transitions and granular physics of colloidal suspensions: studies of collective phenomena by direct confocal microscopy.


Prof. Haim Taitelbaum
Reactive-wetting of metal-metal systems, reaction-diffusion systems, kinetic roughening of advancing interfaces, photon migration models.

Dr. Yoni Toker
Action spectroscopy of biochromophores in the gas phase; photo-electron spectroscopy and photofragmentation mass spectrometry; ion trapping and ion mobility; ultrafast physics; cluster physics.
Department of Physics

Prof. Yosef Yeshurun
Experimental study of magnetic and superconducting systems; the vortex matter in high temperature superconductors; superconductivity in the nano scale; nanomagnetism, high-power applications of superconductors to smart-grids (fault current limiters (FCL), Superconducting Magnetic Energy Storage (SMES)).
Mina & Everard Goodman 
Faculty of Life Sciences

Prof. Moshe Abeles  
Brain research.

Dr. Lior Appelbaum  
Sleep disorders using the zebra fish model.  
Equipment: - two photon microscopes, Zebra fish facility.

Dr. Ido Bachelet  
My group designs new types of machines and architectures based on biological parts and assembly principles. Our focus is DNA origami and molecular robotics for biomedical applications and swarm intelligence in synthetic molecular systems.  
Equipment: - atomic force microscope.

Dr. Ehud Banin  
Studying bacterial biofilm formation, biofouling. Developing new nanoparticles as anti-bacterial and biofilm agents.  
Equipment: - confocal microscope to monitor biofilm formation.

Dr. Mira Barda-Saad  
Developing new cell imaging tools for following immune responses. Focusing on natural killing and T cells. Studying the biology of genetic diseases of the immune system.  
Equipment: - confocal microscopy, life cell imaging.

Dr. Shay Ben-Aroya  
Genome stability from yeast to man and DNA replication control. Applying genetic screens for the identification of cancer-related genes.  
Equipment: - robot for high throughput mutant and drug screening.

Dr. Ilana Berman-Frank  
Marine ecology, nitrogen metabolism, cyanobacteria, and quorum sensing.  
Equipment: - sampling devices for the open ocean.

Prof. Chaya Brodie  

Dr. Cyrille Cohen  
Equipment: - FACS.
Dr. Tamar Juven-Gershon  
Molecular basis of gene expression and the regulation of critical developmental genes in Drosophila and humans. We focus on specific control elements that are embedded in the DNA, and their contribution to the regulation of developmental gene networks. Equipment: fly facility for growing Drosophila populations, AKTA chromatography.

Dr. Don Katcoff  
Transcription regulation in yeast.

Dr. Lee Koren  
Wildlife hormones and behavioral ecology. Studying hormones that are linked with social behaviors in natural environments, focusing on life history traits and trade-offs, non-traditional sex and stress steroids, non-invasive hormone testing, acoustic communication and nature conservation.

Dr. Sivan Korenblit  
Biology of aging and stress in nematodes, focusing on understanding the regulation of ER homeostasis under normal growth conditions, in aging animals and in disease. The lab applies genetics, molecular biology, microscopy and cell biology techniques. Equipment: - imaging facility to visualize and manipulate C. elegans.

Dr. Alon Korngreen  

Dr. Erez Levanon  
Dynamics of genetic information, and how it affects evolution, behavior, and disease. Specifically, we develop technology and algorithms to uncover the full extent of A-to-I RNA editing in human and animal models. Equipment: - targets capturing of DNA for next generation sequencing.

Dr. Oren Levy  
Circadian clock in corals. Equipment: national center for growing corals in my lab.

Prof. Yarden Opatowsky  
Our research is concerned with structure-function investigations of signaling pathways that are involved in neurogenesis, neurodegeneration and neuroregeneration. Equipment: - Bruker X8 x-ray home laboratory, temperature-controlled crystallization rooms, mosquito robot, AKTA FPLC, analytical ultracentrifuge.
Dr. Yoav Paas
Biophysics of neuronal cell channels.
Equipment: - patch clamp for single channel analysis.

Prof. Rafael Perl-Treves
Melon and cucumber molecular genetics. We have mapped and cloned disease resistance genes and characterized plant interactions with pathogens and the broad mite. Male and female flower development in cucumbers, and the control of fruit set, using diverse molecular and genetic tools.

Prof. Ronit Sarid
Herpes-virus biology, with particular attention to the Kaposi’s sarcoma-associated herpes-virus which is known as the ethiologic agent of Kaposi’s sarcoma, a vascular neoplasm of endothelial cell origin. Explore cellular and viral pathways of the KSHV infection cycle and pathogenesis and focus on host-virus interactions.
Equipment: - live-imaging microscopy, confocal microscopy, cell culture facility.

Dr. Rakefet Schwarz
Acclimation of cyanobacteria to environmental stress. 1. Regulated proteolysis of the cyanobacterial light harvesting supramolecular complex. 2. Regulation of biofilm formation in cyanobacteria. 3. Biofuel based on cyanobacteria.
Facilities: - cyanobacterial growth rooms.

Dr. Orit Shaul
Molecular mechanisms that regulate metal homeostasis in plants, with emphasis on the physiological function, phylogenetics, and regulation of expression of the MHX family of magnesium, zinc, and cadmium transporters. Post-transcriptional mechanisms that regulate plant gene expression, including nonsense-mediated mRNA decay and intron-mediated enhancement.
Equipment: - hydroponic plant growth-system, greenhouse.

Prof. Yaron Shav-Tal
Single cell live imaging of gene activity in normal and cancer cells. Gene expression pathway in normal and cancer cells using high-resolution fluorescent microscopy imaging. By peering into living cells, we examine key biological processes as they occur in real-time.
Equipment: - live-imaging microscopy, robot for drug screening with the use of microscopy.

Dr. Galit Shohat-Ophir
Genetics of social behavior. Living in a social environment requires perception of a socially relevant sensory stimulus, representation of this information in the brain, and integration of the stimulus with other relevant cues. Defining the principles by which social interactions among individuals produce specific changes in the brain that lead to behavior modification.
Equipment: - deep sequencing and microscopy.

Prof. Yosef Steinberger
Desert ecology.

Prof. Avraham Susswein
Neurobiology and learning in aplysia.
Equipment: - aplysia farm.

Dr. Amit Tzur
Regulation of mammalian cell cycle progression in normal and cancerous cells.
Equipment: - microscopy.

Prof. Ron Unger
Computational biology of RNA and protein structures.
Equipment: - computer programs for 3D analysis.

Prof. Ron Wides
Developmental biology in flies and mammals. Development-related diseases in mammals.
Equipment: - fly room.

Prof. Gal Yadid
Biology of addiction and depression in mice and rats. Extending implications to humans and development of new anti-depressants.
Equipment: - behavior rooms, HPLC for brain micro dialysis, brain stimulation apparatus.
Prof. Alex Fish
Energy efficient electronics and applications; low power CMOS image sensors, low voltage digital design, energy efficient SRAM, eDRAM and flash memory arrays, secured chips and low power design techniques for digital and analog VLSI chips.

Dr. Dror Fixler
Emission, transmission, detection and sensing of light for biomedical properties. Developing new technologies for fluorescence lifetime imaging (FLIM), medical testing, and light tissue interaction.
Equipment: - Time correlated single photon counting system for FLIM attached to fully motorized inverted research microscope; fluorescence attachment for FLIM.

Dr. Moti Fridman
Investigates cloaking of events in time and developing novel devices for optical processing using nonlinear optics in fibers and in silicon waveguides.

Prof. Sharon Gannot
Speech processing, especially speech enhancement, noise reduction, speaker separation, dereverberation, echo cancellation. Applications: teleconference systems, smart homes, voice over IP, cellular phones, ad hoc microphone networks, eavesdropping.
Equipment: - Acoustic lab with controlled reverberation time (the only one in Israel and one of very few worldwide). Equipped with state-of-the-art audio measurement and acquisition equipment. Allows for fast testing and verification of algorithms.

Prof. Jacob Goldberger
Statistical machine learning, image processing, computer vision, data clustering and error correcting codes.

Dr. Carmit Hazay
Cryptography designing secure and efficient protocols, outsourced secure computation (e.g., using cloud services), protocols that compute any distributed task while ensuring privacy and correctness and adversarial models capture attackers that control a subset of the parties that participate in the computation.
Faculty of Engineering

Dr. Tomer Kalisky
Single cell genomics of tissues, tumors, and cell lines.
Equipment: - Biomark microfluidic single cell PCR and qPCR machines, pipetting robot, fluorescent microscope for mRNA-FISH.

Dr. Yosi Keller
Machine learning, high dimensional data analysis, signal processing, image processing and computer vision, two and three dimensional shape and face recognition, shape spaces, kernel methods, signal processing on graphs, computer vision.

Prof. Amir Leshem
Signal processing for wireless and wireline communications. Signal processing for radio astronomy, statistical signal processing, cognitive radio networks, sensor networks.

Prof. George S. Moschytz
Analog and digital signal processing, including filter theory and design (analog, digital, switched-capacitor, and adaptive), neural networks for signal processing, and the application of signal processing techniques to biological signals and medical needs (e.g. EMG analysis, hearing aids for the profoundly deaf).

Dr. Doron Naveh
Modeling, fabricating and conducting measurements on electronic devices and fundamental properties of two dimensional materials including graphene, MoS2 and Bi2Se3.

Dr. Rachela Popovtzer
Development of ‘smart’ nanoprobes for theranostic-based applications. Specifically, we investigate the design principles of gold nanoparticles to be used as CT contrast agents for molecular imaging of cancer. We also develop nanoparticles that can pass the BBB and target Alzheimer’s disease bio-markers for imaging and therapeutic applications.
Equipment: - Micro-CT (Skyscan).

Dr. Orit Shefi
Manipulation of neuronal growth in regenerative biomedicine and bioengineering. 2D and 3D neuronal cultures and the nervous system of the medicinal leech to study neuronal tissue. Development of chemical and physical technologies, based on nanofeatures, to deliver therapeutics and to promote and control neuronal growth.

Faculty of Engineering

Dr. Anelia Somekh-Baruch
Information theory and communication, channel coding, networks and multiuser communication, cognitive networks, cooperative communication, communication with side information, security in wireless networks, watermarking and information hiding, prediction and filtering.

Prof. Aryeh Weiss
Live cell imaging using digital and confocal microscopy; Imaging of dynamic processes in cells; Translocation of large molecules and nanostructures into cells; Quantitative microscopy.
Equipment: - A fully automated live-cell microscope with on-scope incubator, a confocal time correlated single photon counting (TCSPC) fluorescence lifetime imaging (FLIM) system.

Dr. Avi Zadok
Fiber-optics and photonic devices. Fibers for high-resolution distributed sensing of temperature and strain, and for the processing of microwave and radar waveforms. Integration of active photonic functionalities, such as the generation, amplification and modulation of light, alongside electronics on the silicon material platform. Hybrid material integration.
Equipment: - ultrafast Ti:Sapphire laser system for direct lithography, wafer bonder.

Prof. Zeev Zalevsky
Nanophotonics, silicon photonics and plasmonics- realization of nanomodulators, logic gates and photonic memory cells; microwave photonics and photonics modules such as A2D converters for optics communication networks; optical imaging - super resolution including depth of focus extension; biomedical remote sensing and monitoring.
Equipment: - microscopes, various types of CW and Q-switched lasers and cameras, various numerical software tools for solving Maxwell equation.
Bar-Ilan Institute of Nanotechnology and Advanced Materials (BINA)

Scientific Instrumentation

The Electron Microscopy (EM) Facility, equipped with a variety of scanning and transmission electron microscopes (SEM's and TEM's) is a sophisticated facility for advanced imaging and analysis. It can provide 3D morphology and topography information, as well as 2D imaging with nanometric spatial resolution. We offer high resolution, bright and dark-field imaging, electron diffraction (ED) including crystallographic information, phase and structure identification and determination of unit cell parameters and analytical capabilities using energy dispersive X-ray spectrometry (EDS). Both the scope and sophistication of its equipment make the EM facility an invaluable resource for researchers in semiconductors, ultra-fine grain materials or thin films, solar cells and many other fields that are based on nanotechnology, nanodevices, and materials science.

SEM - Scanning electron microscope, FEI, Inspect
ESEM - Environmental scanning electron microscope, FEI, Quanta
XHR-SEM – High resolution scanning electron microscope, FEI, Magellan 400L
TEM – Transmission electron microscope, FEI, Tecnai G2, high contrast/Cryo TEM
TEM – Transmission electron microscope, JEOL 1400, analytical TEM
HR-TEM – High resolution transmission electron microscope, JEOL, JEM-2100

The BINA Nano Fabrication Facility provides state-of-the-art tools for patterning and crafting devices on a nanometer scale. These include a focused ion beam (FIB), e-Beam lithography, photolithography, and a range of deposition capabilities and clean rooms (Class 100 and 1000) equipped for a variety of fabrication processes. Pattern writing, as well as several failure analysis (FA) processes such as cross-sectioning, TEM lamellias preparation, circuit editing and nanoprobing, are also offered. The Nano Fabrication Facility is equipped with tools for thin layer fabrication with atomic resolution based on a wide variety of material compositions using atomic layer deposition (ALD), pulsed laser deposition (PLD), and advanced sputtering & evaporation systems. Our professional staff and the equipment they manage offer creative solutions for a wide range of fabrication processes.

FIB – Focused ion beam, FEI, Helios NanoLab
e-Beam Lithography, CRESTEC, CABL-9500C
Evaporation & sputtering, Bestec, GMBH
ALD – Atomic layer deposition, Cambridge, Fiji F200
PLD – Pulse laser deposition, Neocera, Pioneer 180 CCS
ICP/RIE – Reactive ion etcher, Plasma-Therm, VERSALINE

BINA’s Surface Analysis Facility has an established reputation for solving a variety of problems in materials science including analyses of polymers, metals, semiconductors, corrosion coatings, thin films, glass and ceramics. Our particular expertise is in the analysis of discoloration, contamination, and adhesion problems. The two analyses most frequently performed in this facility – atomic force microscopy (AFM) and Rutherford backscattering (RBS) – are based on scanning probe microscopy and ion beam analysis techniques.

BINA’s Magnetic Measurements Facility offers comprehensive magnetic characterization, including information about electrical properties, heat capacity, and magnetization. The facility provides magnetic imaging capabilities over a wide range of temperatures. The facility is equipped with a magnetic force microscope (MFM) – a fully operating AFM capable of working in high magnetic fields (up to 8 Tesla), a wide range of temperatures (2K to 400K), and high vacuum. The MFM is used to study magnetic, electronic and morphologic properties of surfaces and devices, with nanometric resolution.

BINA’s Fluorescence Facility enables the performance of fluorescence excitation & absorption spectroscopy, time-resolved fluorescence, fluorescence correlation spectroscopy, fluorescence recovery after photo-bleaching, 3D-FRAP, FRET and single molecule FRET. Imaging modules, stop flow time-resolved measurements and spectral imaging are also offered. Fluorescence excitation & absorption spectroscopy, Cary 100
Time-resolved fluorescence, PicoQuant, MicroTime 200
FCS – Fluorescence correlation spectroscopy, PicoQuant, MicroTime 200
3D-FRAP – Fluorescence recovery after photobleaching, Micro-Imaging system
FRET – Förster resonance energy transfer, PicoQuant, MicroTime 200
PIE-FRET, Single molecule FRET, PicoQuant, MicroTime 200
FLIM – Fluorescence lifetime imaging, PicoQuant + confocal microscope, Olympus
SQUID – Superconducting Quantum Interface Device, Quantum Design
MFM – Magnetic Force Microscope, Autocube.

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SQUID – Superconducting Quantum Interface Device, Quantum Design
MFM – Magnetic Force Microscope, Autocube.

Contact angle measuring and contour analysis instrument, DataPhysics, OCA 20
RBS – Rutherford backscattering spectroscopy, NEC, SS-MR10
Spectroscopic imaging ellipsometer, nanofilm, ep3se

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FLIM – Fluorescence lifetime imaging, PicoQuant + confocal microscope, Olympus
SQUID – Superconducting Quantum Interface Device, Quantum Design
MFM – Magnetic Force Microscope, Autocube.
Faculty of Medicine in the Galilee

Dr. Orly Avni
Immunology, regulation of gene expression in the immune system in health and disease.

Dr. Miriam Bentwich
Medical ethics, bioethics.

Dr. Michael Blank
Molecular and cellular cancer biology. E3 ubiquitin ligases and cancer.

Dr. Moshe Dessau

Dr. Evan Elliot
Neurobiology, molecular neurobiology.

Dr. David Enshell-Seijffers
Developmental biology, the hair follicle as a developmental system to study epithelial-mesenchymal interactions and stem cell regulation, cell communication in brain function and mammalian behavior.

Dr. Meytal Gal-Tanami
Molecular virology, the processes by which pathogenic viruses evade immune surveillance.

Dr. Hava Gil-Henn
Molecular biology, cytoskeleton machinery to understand migratory mechanisms.

Prof. Amnon Harel
Cellular biology, assembly and function of the nuclear pore complex; nuclear targeting of viruses; the connection between neurodegenerative disorders and nuclear transport.

Prof. Izhak Haviv
Cancer, personalized medicine, and diagnostic genomics.

Prof. David Karasik
Genetics of musculoskeletal disease, dissects the underlying mechanisms of heritable musculoskeletal disorders associated with aging such as osteoporosis and sarcopenia; aging as a major risk factor for developing cancer.
Faculty of Medicine in the Galilee

Dr. Omry Koren
Microbiology, the gut microbiome in health and disease.

Dr. Itay Onn
Higher-order organization of chromatin, chromosome instability, and dynamics.

Prof. Mary Rudolf
Public health, social accountability, parenting and health, childhood obesity.

Dr. Avraham Samson
Biochemistry pharmacology, bioinformatics, development of computational tools for drug design.

Dr. Meir Shamay
Cancer virology, viral oncology.

Faculty of Jewish Studies

Zalman Shamir Bible Department
Department of Hebrew and Semitic Languages
Israel and Golda Koschitzky Department of Jewish History
Department of Jewish Thought
Martin (Szusz) Department of Land of Israel Studies and Archaeology
Joseph and Nahum Berman Department of Literature of the Jewish People
Department of Middle Eastern Studies
Naftal-Yaffe Department of Talmud
Program of Jewish Art Studies in the Interdepartmental Division of Jewish Studies
Zalman Shamir Bible Department

Prof. Elie Assis
Biblical narrative, biblical poetry, prophecy

Dr. Michael Avioz
Early biblical interpretation, mainly Josephus Interpretation of the Hebrew Bible, biblical historiography.

Dr. Joshua Berman
Pentateuch formation, Deuteronomy, political thought of the Hebrew Bible.

Dr. David Elgavish
The international relations and the international law in the biblical period. The historical literature in the Bible and its parallels in the ancient Near East.

Prof. Esther Eshel
The late books of the Hebrew Bible, Jewish literature of the Second Temple period, including early Jewish Exegesis. Epigraphy of the First and Second Temple periods.

Prof. Joseph Fleishman

Prof. Amos Frisch
Literary study of the Bible: biblical narrative, Jewish Bible exegesis from the 16th to 19th centuries, biblical kingship, the Book of Psalms.

Prof. Moshe Garsiel
Literary theory of the Bible, art of biblical narrative history, historiography, historical-geography of the Bible, the Bible in the light of archaeology, biblical theology, biblical names.

Dr. Leeor Gottlieb
Aramaic translations of the Bible, textual criticism of the Bible, the diachronic analysis of biblical Hebrew, the integration of computer applications in biblical research.

Prof. Ed Greenstein
The Book of Job, the Book of Lamentations, literary theory and biblical literature, Canaanite (especially Ugaritic) literature, wisdom literature, northwest Semitic Languages, narrative in the ancient Near-East and in the Bible

Dr. Jonathan Grossman
Literary theory, biblical narrative.

Dr. Lea Himmelfarb
Biblical accents (ta’amei hamikra) and masora, biblical exegesis, biblical historiography.

Dr. Jonathan Jacobs
Medieval biblical exegesis, the art of biblical narrative.

Prof. James Kaddurie (Kugel)
Modern biblical scholarship, the literature of the Second Temple Period, ancient biblical Interpretation.

Prof. Jacob Klein
Assyriology and biblical studies, Sumerian and Akkadian language and literature, poetical books (Psalms, Proverbs, Job) and the Five Scrolls, relationship between ancient Mesopotamian culture and the Bible.

Prof. Eric Lawee
Jewish biblical scholarship in medieval and early modern times.

Prof. Yosef Ofer
The masora, accentuation of the Hebrew Bible, medieval biblical exegesis.

Dr. Nili Samet
Assyriology, Sumerology, ancient wisdom literature, diachronic dating of biblical materials, Book of Ecclesiastes.

Dr. Yael Shemesh
Biblical narrative, prophetic stories, measure for measure in the Bible ideological interpretation of the Bible (esp. feminist interpretation of the Bible, animal ethics), mourning in the Bible.

Prof. Uriel Simon
Biblical narrative, Jewish biblical exegesis in Spain.

Prof. Shmuel Vargon
Pre-exilic and ancient Near Eastern historiography, literary linguistics, historical aspects of the prophetic books, early 19th century Jewish exegesis (in particular Samuel David Luzzato).
Department of Hebrew and Semitic Languages

Dr. James Nathan Ford
Aramaic incantation bowls and the dialects in which they are written (Jewish Babylonian Aramaic, Mandaeic and Syriac); Ugaritic philology.

Dr. Jacob Klein
Sumerology (including Sumerian language and literature; in particular Sumerian royal hymns); Assyriology (including Akkadian language and literature); Bible (including the books of Psalms, Proverbs, Job and the Five Scrolls).

Prof. Zohar Livnat
Syntax and semantics of modern Hebrew; pragmatics; discourse analysis; rhetoric (especially the rhetoric of scientific and academic discourse); language and law.

Dr. Adina Moshavi
Biblical Hebrew syntax, Biblical Hebrew pragmatics, speech acts, politeness theory, argumentation theory, word order, and lexical semantics.

Dr. Malka Muchnik
Modern Hebrew, sociolinguistics, language and gender, bilingualism, language changes, word formation, foreign influences, psycholinguistics, translation, stylistics.

Dr. Michael Ryzhik
Medieval Hebrew; Rabbinical Hebrew; Hebrew in Italy; Judeo-Italian; The language of sermons; The Italian of the Church in the 16th century.

Dr. Rivka Shemesh Riskin
Syntax, semantics, pragmatics, discourse analysis; verb classes; Mishnaic Hebrew.

Dr. Tsvi Sadan (Tsuguya Sasaki)
Modern Hebrew morphology and phonology, linguistic comparison of modern Hebrew to other language periods and other languages; linguistic study of Ladino (Judeo-Spanish) since the 16th century, especially in liturgical and Halakhic texts.

Israel and Golda Koschitzky Department of Jewish History

Dr. Dotan Arad
Judeo-Arabic studies, late genizah documents, The Jews of the eastern Mediterranean world in the Middle Ages, Karaites and rabbanite relations, natives and immigrants relations.

Prof. Gershon Bacon
Political, social and intellectual history of Russian and Polish Jewry, 19th and 20th century, with special emphasis on interwar period; History of Orthodox Jewry in Eastern Europe: history of rabbinate; Jewish women's history in Poland; political and ideological movements in 19th and 20th century European Jewry.

Prof. Meir Bar-Ilan
Pseudepigrapha, Liturgy, Ancient Poetry, Hekhalot Literature, Literacy, Social History, Sectarianism, Medicine, Magic, Astrology, Numenology.

Prof. Judith Baumel-Schwartz
Holocaust and State of Israel studies with emphasis on topics of gender, religion and commemoration. Orthodox Jewish women in the post-war era.

Dr. Idan Breier
History of the international relations in the ancient Near-East and the Bible in comparison with modern international relations; cultural studies of the Bible lands; philosophy of history.

Prof. Kimmy Caplan
Jewish religious history in the 19th and 20th centuries, including topics such as popular religion, sermons and homiletics, religious trends and denominations, and religious radicalism.

Dr. Yitzchak Conforti
Zionism, Jewish Nationalism, Zionist History and Memory, Jewish and Zionist historiography, and the Jewish Yishuv in the Land of Israel 1882-1948.

Prof. Shmuel Feiner
Modern Jewish History in 18th-19th Centuries Europe; The Jewish Enlightenment Movement (The Haskalah); The Jews in Early Modern Europe; The Jews in Germany; Jewish Secularization; The Jewish Kulturkampf; Jewish women in modern Europe; Jewish Historiography.

Prof. Emanuel Friedheim
Ancient Jewish History in the Second Temple period and the Mishnah and Talmud era; Paganism in the Land of Israel; and in Talmudic Literature; Talmudic Realia; Ancient Jewish Music; Graeco-Roman Culture and the Jews; Ancient Medicine; Jewish Education in Ancient Era; Religious Dissidence; Jews and Judaism in Roman law.
Dr. Uriel Gellman
History and Culture of Polish Jewry.

Prof. Aharon Gimani
Study of Jewish Communities in Yemen.

Prof. Yaron Harel
Jewish History in the Middle East, Rabbinic literature, tradition and society.

Prof. Elimelech Horowitz
Jewish History in Medieval and Early Modern Europe.

Dr. Yigal Levin
The history of Israel during the Biblical and early Second Temple periods, especially as related to the archaeological and epigraphic records and as they are connected to the wider history of the ancient Near East. The society of biblical Israel. Biblical genealogies, and historical geography. The Bible as a source for the history of ancient Israel. The historiographical books of the Bible. The history of the Land of Israel during the Persian Period.

Prof. David Malchiel
Jewish culture in Europe during the Middle Ages and early modern era, focusing on Italy.

Prof. Dan Michman
The Holocaust; historiography, ghettos, Jewish councils, final solution, religious Jewry, refugees and rescue, the impact of the Holocaust on world Jewry and on Israel, western European Jewry in modern times, post-Zionism.

Dr. Orly Meron
Economic and demographic history of the Jews.

Prof. Moshe Orfali
History of the Jews and Crypto-Jews in Spain, Portugal and the New World, History of the Jewish-Christian Debate in the Middle Ages, Social and Cultural History of the former Marrano Diaspora in Western Europe, The Sephardic Communities in the Orient and in the Ottoman Empire.

Prof. Shaul Regev
Jewish preaching in mediaeval and renaissance. Jewish thought in the East after the expulsion of Spain.

Prof. Benzion Rosenfeld
Jewish History during the Second Temple, Mishna and Talmud period, and Graeco-Roman Culture, and the History and Culture of the Christian World.

Prof. Moshe Rosman
Polish-Jewish history, early Hasidism, women’s history and historiography. He specializes in combining Polish archival sources with Jewish sources. Analyzing the applicability of postmodern postulates when writing Jewish history.

Prof. Adiel Schremer
Jews and Judaism in Late Antiquity; Marriage and Family; Heresy in Jewish History; Early Christianity; Rabbinic Literature; History of Halakha and Jewish Law; Legal Theory.
Department of Jewish Thought

Prof. Daniel Abrams
Jewish Mysticism and Kabbalah, with particular interest in textual theory, editorial practice, hermeneutics and gender.

Dr. Hanoch Ben Pazi
Contemporary Philosophy and Modern Jewish Thought.
Religious Studies, Critical Theology, Ethical Monotheism, Secular Judaism and Zionist Thinkers.

Dr. Avi Elqayam
Medieval Jewish philosophy, Jewish mysticism, Jewish messianism across the ages with particular emphasis on varieties of Sabbatean messianism, Sufi mysticism in Islam.

Prof. Shmuel Harvey
Medieval Jewish Philosophy.

Dr. Itzchak Hershkowitz
Religious Responses to the Holocaust (with special attention to kabbalistic and hassidic responses), Religious Zionism (ideology, relations with the Israeli State), Philosophy of Halakha (with focus on modern rabbinic halakhic literature), Modern Rabbinic Thought.

Prof. Hanna Kasher
Medieval Jewish Philosophy.

Dr. Tsippi Kauffman
Foundational issues in hasidism (worship through corporeality, ritual immersion, immanentism, hasidic story, etc.); religion and gender.

Prof. Efraim Meir
Modern Jewish philosophy and contemporary Jewish philosophy, Rosenzweig's philosophy, Levinas's ethical metaphysics and Jewish writings, Buber's and Heschel's Jewish thought, Jewish existentialism and Jewish dialogical philosophy, Jewish thought on the Shoah.

Dr. Micael Schneider
Early Jewish mysticism and magic, pseudepigrapha, Philo as a mystic, hekhalot literature, Jewish roots of early christology, angelology, messianism, traces of Jewish mysticism in diverse religious traditions – Gnostic, Zoroastrian, Mandaeans, Manicheans, Syriac. Judeo-Slavic cultural interaction in the Middle Ages, Maimonides and mysticism, approaches to myth, magic, and mysticism, Gershom Scholem as a philosopher of myth.

Department of Jewish Thought

Prof. Shlomo Sela
The reception of Greco-Arabic science by medieval Jewish society; Jewish attitudes toward the sciences in the Middle Ages; Jewish astrology and astronomy in the Middle Ages; Abraham Ibn Ezra's scientific corpus, with special interest in his astrological and astronomical oeuvre; scientific ideas in Abraham Ibn Ezra's and Gersonides' biblical exegesis.

Prof. Dov Schwartz
Medieval Jewish thought and philosophy; philosophical Jewish-Muslim relations; astral magic in Jewish thought and kabbalah; twentieth century Jewish thought; religious Zionist thought and theology; Jewish intellectual history.
Martin (Szusz) Department of Land of Israel Studies and Archaeology

**Prof. David Adan-Bayewitz**
Archaeology of Hellenistic, Roman and Byzantine Palestine; applications of scientific methods for the analysis of archaeological remains, and particularly ceramics (archaeometry); and the inhabitants of Roman Palestine—culture (customs and religious practices, social forms and material remains), economic history and settlement history—as reflected by the archaeological and archaeometric evidence and the literary sources.

**Dr. Nira Alperson-Afil**
Prehistoric archaeology; lower and middle Palaeolithic periods, technology and typology of stone tools, early use of fire, and the evolution of human behavior; use of GIS software for spatial analyses of archaeological material at the Acheulian site of Gesher Benot Ya'aqov.

**Prof. Zohar Amar**
History of science in ancient times (particularly in Jewish sources); agriculture; material culture and everyday life in the Middle Ages; the history of medicine and ethnopharmacology.

**Dr. Shawn Zelig Aster**
History and geography of the biblical period; historical background to biblical prophetic literature; connections between the Neo-Assyrian empire and biblical Israel.

**Prof. Kobi Cohen-Hattab**
Pilgrimage and tourism to the Holy Land in the modern era, holy sites, tourism in historical cities, Zionism and the sea.

**Prof. Shimon Dar**
Landscape archaeology and rural archaeology of the Classical Periods. Large scale excavations and surveys on Mount Hermon, western Samaria and Mount Carmel.

**Prof. Joseph Drory**
Islamic Palestine (mostly in late Middle Ages): Arab reactions toward the crusades; Arab rulers and their presentation in Arabic historiography, linguistic features of the Mamluk chronicles.

**Prof. Esther Eshel**
The late books of the Hebrew Bible, as part of Jewish literature of the Second Temple period, including early Jewish exegesis; epigraphy of the First and Second Temple periods.

**Prof. Avraham Faust**
Archaeology of and history of the ancient Near East and ancient Israel in the Bronze and Iron Ages (biblical archaeology), especially from an anthropological perspective (with a stress on Israelite society). Study of ethnicity and identity, the rural sector, social stratification, social and political organization, state formation processes, urbanization, cognitive archaeology, the relations between history (including the Bible) and archaeology, and human-environment relations. Currently excavating at Tell Eton.

**Prof. Yvonne Friedman**
Peace processes between Christians and Muslims during the Crusades, conciliatory gestures, diplomacy and non-verbal communications; pilgrimage and tourism-medieval and modern; medieval anti-Semitism—the Christian-Jewish polemic; women in a fighting society; "limmud"—the implementation of the concept of Jewish learning in different Jewish communities.

**Dr. Tamir Goren**
The Jewish-Arab conflict. Mixed cities and local government in Eretz Israel during the British Mandate. Historical geography of Eretz Israel during the British period and in the first years of the State of Israel.

**Prof. Amos Kloner**
Archaeology of Hellenistic, Roman and Byzantine Palestine and southern Levant. Archaeology of Jerusalem, Maresha, Bet Guvrin, Bar Kokhba War.

**Prof. Aren Maeir**
Bronze and Iron Age (late 4th thru 1st millennia BCE) archaeology of the ancient Near East; biblical archaeology; applications of science in archaeology; the material culture of Philistia; The archaeology of the Sea Peoples and Philistines; weapons and warfare of the ancient Near East; interdisciplinary research in archaeology; the archaeology of collective memory.

**Dr. Avi Picard**
The relationships between ethnic groups in Israel, immigration to Israel during the first decade and settlement and absorption processes.

**Prof. Eyal Regev**
Social and religious history and social archaeology of the Second Temple period. Qumran and the Dead Sea Scrolls, early Christianity, the Hasmoneans and Herod, Pharisees, Sadducees and other religious groups; social scientific study of Second Temple Jewish society.
Martin (Szusz) Department of Land of Israel Studies and Archaeology

Dr. Lilach Rosenberg-Friedman
The history of society, culture, women and gender in Jewish society during mandatory Palestine and the early years of the State of Israel; religious Zionism

Prof. Ze’ev Safrai
Classical periods (Hellenistic, Roman and Byzantine periods), mainly from the Rabbinic point of view. Jewish community, economy of Roman Judea demographic process. A sociological and historical commentary of the Mishna.

Prof. Joshua Schwartz

Dr. Ehud Weiss
Archaeobotany (Palaeoethnobotany): The study of past human activities via studies of the remains of plants in archaeological contexts- reconstruction of past humans’ food and environments, past climate, agricultural practices, commerce and economic relationship, social stratification, habitat, food technology; plant domestication and the origin and spread of agriculture: the “founder crops” - the cereals, the pulses, oil and fiber plants - their wild progenitors, first domestication and spread from the core area outbound.

Prof. Boaz Zissu
The archaeology of Israel during the Hellenistic, Roman and Byzantine periods. Historical geography of Jerusalem and Judea; settlement patterns, private and public architecture and planning in the Hellenistic, Roman and Byzantine Near East; Classical and Byzantine material culture, with an emphasis on the research of the coins, pottery and glass finds; archaeological recording and surveys methods; architecture, art, archaeology and stratigraphy of man-made caves; ancient agricultural technology in the Near East.

Joseph and Nahum Berman Department of Literature of the Jewish People

Dr. Rachek Albeck Gidron
Modern Hebrew literature from the late nineteenth and early twentieth centuries in Europe and Israel. The works of Uri Nissan Gnessin and Yoel Hoffman. An interdisciplinary study of the interrelations among continental philosophy, modern and postmodern literature and Western visual art. The pronunciation of Hebrew prosody in the early twentieth century and the transition from Ashkenazi to Sephardic and Eretz Israel pronunciation.

Prof. Benjamin Bar-Tikva
History of liturgical poetry (piyyut); oriental piyyutim of the last centuries; piyyut and halakha; medieval Provencal and Catalanian piyyutim.

Dr. Nathan Cohen
Cultural history of eastern European Jews in the nineteenth century and in the first half of the twentieth century with special interest in modern Yiddish literature.

Dr. Moshe Goultshcin
Modern Hebrew literature and poetry; Culture and literary criticism: primarily focused on modern Hebrew and Israeli culture’s interconnections with Jewish and Christian theology (especially Protestant: between Schleiermacher and Tillich), Political theology, ethics and ideology issues; hermeneutics, phenomenology and criticism of culture.

Dr. Roman Katsman
A history of aesthetics, history and myth: the work of Agnon, rhetoric and sincerity in Agnon, languages of the modern literature, body, myth, city: from Yaakov Steinberg to Etgar Keret, gestures in the modern literature, poetics, a theory of poetry, Shmuel Yosef Agnon and Chaim Hazaz.

Dr. Ber Kotlerman
Yiddish language and culture, old Yiddish, history of the Jews in eastern Europe and the USSR, Jews in the Far East, Jewish onomastics, Jewish journalism and press, Sh.Y. Agnon’s works, Yiddish literature and theater, Jewish early cinema.

Prof. Rella Kushelevski
The Hebrew story in medieval Ashkenaz: the multi-version story in Hebrew story collections (thematology and folklore); the poetics and thematics of Rabbinic aggadic narratives in the Talmud and midrash (application of reader-oriented hermeneutics).
Department of Literature of the Jewish People

Prof. Avidov Lipsker
Modern Hebrew literature focusing on the period of the third and fourth immigration waves of the 1920s and 1930s; analysis of the principal works of the poets of that period: Uri Zvi Grinberg, Yitzhak Lamdan, Shin Shalom, Yitzhak Ogen, Avraham Broides and Yaakov Orland. "Literary ecology," a new theoretical model of "cultural ecosystem" which seeks to provide a new explanation for the replacement of poetic models as events in an ecological literary habitat; thematology of the literature of the Jewish People proposing a polysystemic theoretical model dealing with versions of the Jewish story.

Prof. Zvi Mark
Hasidic literature.

Dr. Lilach Nethanel
Theories of interpretation, the study of discourse, and philosophy of literature. French semiotics and structuralism (A.J. Greimas, Roland Barthes); modern linguistics converted to the study of literature (De Saussure, Jacobson, Benveniste); philosophy of literature (Derrida, Blanchot, Foucault); phenomenology and literature (Husserl, Merleau-Ponty, Derrida); the nouveau roman in France and the poetic of the regard (Sarraute, Duras, Butor); historiography of modern Hebrew literature; principal descriptions of the historical development of the modern Hebrew literature (From Nachum Sluzt to Dan Miron); the turn of the siècles in the modern Hebrew literature; bilingual auteurs (Yiddish and Hebrew); the 'mimetic failure' – the Hebrew realism.

Prof. Shemuel Refael
Judeo-Spanish (Ladino), Sephardic folklore and literature, Sephardim and the Holocaust: literary aspects.

Dr. Revital Refael-Vivante
Medieval Hebrew literature, secular Hebrew literature in Spain, poetry - maqama and rhymed prose, fables, Hebrew literature in the Balkans.

Dr. Claudia Rosenzweig
Hebrew medieval literature, modern Hebrew literature, modern Yiddish literature, history of the Yiddish language, Judaeo-Italian languages, Italian literature of the Renaissance, philology.

Dr. Avi Shmidman
Literary and linguistic aspects of early Palestinian poetry, literary and linguistic aspects of medieval Spanish Hebrew poetry, the development of the Jewish liturgy, especially the grace after meals.

Dr. Vered Tohar
Thematology of the Jewish story, narratology of the Jewish story, reception history of the Jewish story, the Hebrew book in the 16th century, modern Hebrew literature: from the 1960s to the 1990s, children's literature, personal narrative analysis.

Prof. Hilel Weiss
Modern Jewish literature.

Dr. Tamar Wolf-Monzon
Poetics of Uri Zvi Grinberg, poetry of the third aliyah: linguistic, stylistic and socio-literary aspects, poetry and politics, Hebrew song in the yishuv and early years of the state: poetic, historical and cultural aspects, literary work of Ya'akov Orland.
Department of Middle Eastern Studies

**Dr. Efrat Aviv**
Turkish republican history and politics; Turkish Sufi orders Turkish Jewry; the Ottoman Empire; religious movements in Turkey; Turkish poetry.

**Dr. Yehuda Balanga**
Post-revolutionary Egypt; foreign involvement in the Middle East (esp. of the Soviet Union); modern Syria.

**Dr. Elad Ben-Dror**
The Arab-Israeli conflict; UN involvement in the Arab-Israeli conflict; the Palestinian refugee problem; terrorist organizations in the Middle East.

**Dr. Michael Erlich**
Urbanization in the Mediterranean area during the medieval period; Islamization and Arabization, medieval Mediterranean military history - battle fields' reconstruction.

**Prof. Hillel Frisch**
Palestinian politics, the evolution of Middle East states, nationalism and religion in the Middle East, security studies related to the Middle East, Israel's Arab citizens.

**Prof. Michael Laskier**
Israel and the Arab world; 19th and 20th century Maghreb; modern Jewish history in the Middle East, Maghreb and France; French politics, the Maghreb and Islam; Israeli society since 1948.

**Prof. Yaacov Lev**
Social, economic, and military history of the Middle East in the high Middle Ages - Egypt and Syria from the 9th to the 12th centuries.

**Prof. Zeev Maghen**
Modern Iran; medieval Sunni jurisprudence; classical Muslim attitudes toward Jews and Judaism.

**Dr. Joseph Mann**
The oil industry and energy markets and policy; Saudi Arabia and the Arab Gulf States.

**Prof. Dan Shaphira**
The Ottoman Empire; minorities in the Ottoman Empire; Kurds; the former Soviet Central Asian Republics.

**Prof. Adam Silverstein**
History of Islam.

Department of Middle Eastern Studies

**Prof. Eliezer Tauber**
Modern history of the Middle East Arab nationalist movements; the formation of the modern Arab states; the Middle East in World War I; Syria and Iraq intelligence in the Middle East; the Arab-Israeli conflict; Canada and the Middle East 1948 war.

**Prof. Josh Teitelbaum**
Democratization and liberalization in the Middle East; Saudi Arabia tribes in the Middle East; state and society in the Middle East; Palestinian nationalism; the military and society in the Middle East; the Arabian Peninsula.
Naftal-Yaffe Department of Talmud

Dr. Aaron Ahrend
Liturgy and festivals in Jewish law and literature; customs; critical edition of Rashi’s commentary on the Talmud.

Dr. Aaron Amit
The Babylonian Talmud; stories in rabbinic literature; rabbinic lexicography.

Dr. Arnon Atzmon
Aggadah and midrash.

Prof. Meir Bar-Illan
Rabbinic magic and mysticism; history of prayer; the minor tractates; medicine in rabbinic literature; astrology and numerology in rabbinic sources.

Prof. Avinoam Cohen
Babylonian Talmud (terminology and chronology); Saboraic literature.

Dr. Barak Cohen
Babylonian Talmud, modes of legal interpretation and decision-making; the Babylonian rabbinic academies, especially history and chronology.

Dr. Judah Galinsky
Medieval rabbinic literature; history of the Hebrew book.

Prof. David Henshke
Tannaitic halakhah and its history; Maimonides.

Dr. Binyamin Katzoff
Tannaitic literature; geonic literature; history of halakhah.

Prof. Chaim Milikowsky
Midrashic literature; exegetical methodology from Second Temple times to the end of rabbinic literature; intellectual history of Judaism in the Hellenistic-Roman Period; textual criticism of rabbinic literature.

Prof. Leib Moscovitz
Palestinian Talmud (text, language, redaction, interpretation); modes of rabbinic thought; history of talmudic halakhah; the modern analytic school of rabbinics.

Prof. Yosef Rivlin
Jewish family law; legal documents from the Cairo Geniza; wills and inheritance in Jewish law; bills and contracts in Jewish law; the Vilna Gaon and his disciples.

Naftal-Yaffe Department of Talmud

Prof. Mordechai Sabato
The Babylonian Talmud; tannaitic midrash.

Prof. Aharon Shemesh
Qumranic literature; history of halakhah.

Dr. Jeffrey Woolf
Medieval rabbinic literature.
Program of Jewish Art Studies in the Interdepartmental Division of Jewish Studies

Dr. Ilia Rodov
Jewish art, Jewish visual culture in Europe, synagogue art and architecture, depictions and descriptions of synagogues, iconography of Jewish art, symbols in Jewish art, symbols of divine presence in Jewish art, aspiration for knowledge as reflected in Jewish art, utopias in art, Biblical imagery, Jewish rituals and ceremonies, medieval synagogues, early printed Jewish books, Hebrew printed books, Hebrew script in Christian – Jewish relations in art.

Prof. Bracha Yaniv
Jewish art, Jewish ceremonial objects, Jewish visual culture and ethnography, synagogue art and architecture, iconography of Jewish art, symbols in Jewish art.
Department of Arabic

**Prof. Binyamin Abrahamov**

**Dr. Basilius Bawardi**
Modern Arabic poetry; the ideological text; influence of the popular press on the development of modern Arabic literature; the formation and development of genres in 19th and 20th century Arabic; Western-Eastern - Arab encounter and its influence on the modern Arabic literary text.

**Prof. David Doron**

**Prof. Joseph Drory**
Medieval Islamic history, Arab geographers, Palestinian towns under the Mamluks, Ayyubid sovereigns, Arabic response to the Crusades, Mamluk scholars, religion and state relations under the Mamluks.

**Dr. Dorit Gottesfeld**
Arab women's fiction, especially Palestinian women's fiction. Post-modern linguistic style in feminine discourse; cultural life in the West Bank and Gaza Strip.

**Dr. Livnat Holtzman**
Islamic theology, Islamic jurisprudence, and classical poetry: the writings of Ibn Qayyim al-Jawziyya; anthropomorphism in traditionalist Islam; theological didactic poetry.

**Dr. Almog Kasher**
Medieval Arabic grammatical tradition; theories, concepts, and terminology of the Arab grammarians; early history of this tradition.

**Dr. Mordechai Kedar**
Rhetoric in Arab journalism, gender, and society, and Islamic movements; tribalism in the Arab world.

**Prof. Tzvi Langermann**
Islamic and Jewish science and philosophy in the Middle Ages; Ibn Kammūna’s Kalimāt wajīza; Averroes’ On the Theriac; Galen in the Hebrew and Arabic traditions; the thought of Moses Maimonides.

**Prof. Eliezer Schlossberg**
Biblical exegesis of Rav Saadia Gaon. Yemenite “Midreshei–Agada:” an Anonymous Yemenite Midrash-Torah (dated 1525) and The Commentary of R. Avraham ben Shlomo on the Twelve Minor Prophets (in edition). He also wrote on the Commentary of R. Zecharia ben Shlomo the Yemenite on the Song of Songs; Middle-Ages and modern polemics between Jews and Moslems.

**Dr. Koby Yosef**
Ethnic groups, social relationships and dynasty in the Mamluk Sultanate (1250-1517); political and social history of the Mamluk Sultanate, Islamic political thought and Islamic law.
Department of Classical Studies

**Dr. Gabriel Danzig**
Ancient moral and political philosophy, Socrates, the writings of Xenophon, Plato, and Aristotle, Jewish philosophy and thought, historiography, literature.

**Dr. Daniela Dueck**
Ancient Greek and Roman traditions of geographical writing; the geographer Strabo of Amasia; fragments of lost geographical works; ethnographic concepts in classical antiquity; intertextuality.

**Prof. Ranon Katzoff**
Papyrology; Roman law; rabbinics.

**Dr. Lisa Maurice**
Roman comedy, ancient drama, ancient education, the reception of the ancient world in modern popular culture, in popular fiction and in children's literature, Greek and Latin literature.

**Prof. David Schaps**
Ancient Greek economic and social history, Greek and Latin literature, linguistics, ancient law.

Department of Comparative Literature

**Prof. Thierry Alcoloumbre**
Interactions between Judaism and ancient Greek culture (philosophy, religion and literature), including: Greek mythology compared with Midrash Aggadah; the Aristotelian legacy in the works of Maimonides and the Maharal of Prague; myth and midrash in modern and postmodern times.

**Dr. Sharon Aronson-Lehavi**
Theatre and performance studies: medieval theatre; modern theatre; Israeli theatre and performance; performance theory.

**Dr. Lea Dovev**
Art-theories, music-theories, theology and philosophy of the Italian Renaissance 1400-1700; European art-history; philosophy of art-history; the science of the body in Italian Renaissance culture; Leonardo da Vinci's writings.

**Dr. Anat Koplowitz-Breier**
The interaction between poetry, the Bible and the myth; the epic: from antiquity to the German Middle Ages, 20th century poetry: focusing on German-Jewish poets, the intertextual relations between western and Hebrew poetry.

**Prof. Rina Lapidus**
Russian influences on modern Hebrew literature. Jewish women writers in the former Soviet Union.

**Dr. Yaacov Mascetti**
Pre-scientific discourses and literature; alchemy and poetry; early-modern women writers; Protestant theological discourses and women poets; Miltonic theology and poetry; metaphysical poetry.

**Dr. Shlomy Mualem**
The inter-relations between philosophy and literature; aesthetics; literary theory; philosophy of language; the work of Jorge Luis Borges; Plato's philosophy; Wittgenstein's philosophy; comparative philosophy: east and west, Judaism and western philosophy.

**Prof. Sandra Stow**
Italian literature: Dante and Jewish mysticism; Italo Calvino; Umberto Eco. European literature in the Middle Ages: the neoplatonism of the 12th century; the romances of Chrétien de Troyes; women and literature in the Middle Ages. Medieval eremneutics; medieval eastern-western cultural patrimony; Italian linguistics (Judeo-Italian); history of the Italian language.
Department of English Literature and Linguistics

Literature

Prof. Evan Fallenberg
Literary translations of short fiction and plays (Meir Shalev, Yair Lapid and others); and the compilation of resource materials and teaching strategies for training literary translators.

Dr. Daniel Feldman
European modernisms, epistemology in Romantic and modern English poetry, literary theory, the writing of disaster, subjectivity in Holocaust literature, representations of memory and amnesia in post-war contexts, children in Holocaust literature, and comparative immediate postwar Polish, German, and Jewish fiction and cinema.

Prof. Susan Handelman
Jewish thought and literary criticism, visual rhetoric—the relation of text and image; the relation of literary theory to the teaching of literature, gender and Jewish visual rhetoric.

Prof. William Kolbrener
John Milton and early modern poetry, history, politics and theology, as well as early modern proto-feminism, particularly the work of Mary Astell and her contemporaries. The relationship between rabbinics and literary theory, the relation between Talmudic hermeneutics and psychoanalysis.

Prof. Michael Kramer
American literature (Jewish American literature in particular), Jewish literature, religion and literature, and creative writing; Jewish and Jewish American literary historiography and the conceptualization of assimilation in Jewish American thought and writing, Promotion of Jewish creative writing in Israel and in America through Kisufim: The Jerusalem Conference of Jewish Writers, annotated translation of S.Y. Agnon's 'And the Crooked Shall be Made Straight.'

Prof. Kinereth Meyer
Literary modernism; modern drama; modern poetry; literature and ethics.

Prof. Jeffrey Perl
Modernism and postmodernism in anglophone and French literatures; T.S. Eliot, Joyce, Pound, Yeats, Beckett, and Mallarme; the history of criticism, taste, and philosophical aesthetics; applications of the concept of charity (caritas) in historiography, philosophy, and scholarship.

Department of English Literature and Linguistics

Literature

Dr. Yael Shapira
Eighteenth-century British literature and culture, the dead body in the eighteenth-century novel; questions of gender, the relationship between popular and canonical literature.

Dr. Marcela Sulak
Twentieth century American literature, modernism, poetry & poetics, prosody, hybrid literary forms and literature, feminism and translation theory.
Department of English Literature and Linguistics
Linguistics

Prof. Sharon Armon-Lotem
Language acquisition by bilingual children who have been diagnosed for Specific Language Impairment (SLI), monolingual and bilingual typical acquisition in children with SLI; linguistic and cognitive phenomena which characterize language impairment and bilingualism in children, the gap between the linguistic abilities of children and those of adults, all this against the background assumption that there is an innate language capacity which children make use of in the acquisition of language; the identification of SLI indicators in English-Hebrew bilingual children has been expanded to bilingual Russian-Hebrew children.

Dr. Michal Ben-Shachar
Neurobiological infrastructure underlying human language systems; application of neuroimaging techniques such as functional MRI and diffusion tensor imaging to understand structural and functional properties of these brain systems, and relate them to specific linguistic functions in healthy and clinical populations; ongoing studies include (a) the neural basis of stuttering, (b) reading pathways and cognitive functions in adults with little exposure to print, (c) language systems in patients with tumors, multiple sclerosis or stroke, reading, and (d) white matter development in children born prematurely.

Dr. Gabi Danon
Morphosyntactic features and their representation (especially nominal features); agreement and its relation to semantics; the internal syntax of noun phrases; the syntax of quantifiers, numerals and other determiners; grammatical number and syntactic plurality; the syntactic encoding of definiteness and its relation to the structure of the noun phrase and to the semantic definite-indefinite distinction; case and differential object marking; features and underspecification; feature-based grammar formalisms; experimental syntax.

Prof. Jonathan Fine
Language of psychiatric syndromes including among others schizophrenia, autism and attention deficit hyperactivity disorder; the research is guided by functional-systemic linguistics and explores how the disorders sound the way they do and thus convey the rather atypical sets of meanings that are documented from a clinical perspective; chiefly the investigations are within the interpersonal and textual metafunctions.

Dr. Yael Greenberg
Semantics and its interaction with syntax and pragmatics; the syntax-semantics-pragmatics interface of copular and generic sentences, and of constructions expressing measurement and addition in the nominal and the verbal domain. The semantics-pragmatics interface, and in particular the information and discourse structure contribution, of focus sensitive expressions such as exclusives, strengtheners, contrast expressions, and approximators.

Dr. Lior Laks
Morphology and its interface with other components of the grammar; phonology, the lexicon and the syntax; word formation processes while relating to different types of criteria that play a role is the selection of morphological forms, productivity of word formation and the absence of possible words that conceptually could be formed; diglossia in Arabic and the grammatical differences between modern standard Arabic and colloquial Arabic (Jordanian and Palestinian), as an issue with a first degree importance in the system of education and in teaching Arabic.

Prof. Susan Rothstein
The relation between syntactic structures and semantic interpretation; crosslinguistic expression of counting and measuring and the semantics of aspect; the semantic basis of aspectual distinctions, and the crosslinguistic variation in the expression of these distinctions.

Prof. Elinor Saiegh-Haddad
Acquisition of literacy and the relationship between oral language processing skills and reading/writing development; contexts characterized by linguistic distance between the spoken first language of children and the primary language of literacy, such as the diglossic context of Arabic and bilingual (including second language/foreign language) contexts.

Prof. Joel Walters
Bilingualism/code switching; narrative development in bilingual children and adults; language impairment in bilingual preschool children and adult aphasics; Sociopragmatics: social identity and language acquisition in language minorities.

Dr. Galit Weidman Sassoon
Language and cognition. Conceptual differences between adjectives and nouns affect their acceptability in linguistic constructions, their usage (as revealed in large corpora), their processing, and their neural correlates – additional experiments investigate the ways children and adults classify entities under adjectives.
Department of French Studies

**Dr. Silvia Adler**
Ellipsis, strategies of linguistic economy, simple and compound prepositions, scalarity, intensification, prepositional quantifiers, argumentation in comics, general nouns, tautology, litotes.

**Dr. Tovi Bibring**
Didactic and exemplary literature, fable-lore, cultural migrations in Medieval France, medieval courtly and popular culture, medieval misogyny, critical manuscript editing, intersections of the sacred and the profane in 12th-15th French literature.

**Dr. Simone Grossman**
French and Quebecois modern and contemporary literature. Interaction between modern and postmodern art and literature in France and Canada (Quebec, Franco-Ontarian and English), the short story and ecology in literature.

**Dr. Roselyne Koren**
Conceptualization of an ethics of discourse, rhetoric of the French traditional written and digital journalism (journalism on the web), argumentation in political discourse, arguments by analogy, the ethical commitment of discourse analysis scholars.

**Prof. Gary D. Mole**
French and francophone literature, culture, and thought of the 20th and 21st centuries, with particular emphasis on the relations between literature, violence, and modern warfare. French combat poetry of the First World War, francophone Jewish poetry of the Shoah, and the narrative strategies involved in the representation of violence, war, and genocide in postcolonial francophone Sub-Saharan African fiction.

**Dr. Galia Yanoshevsky**
Contemporary French literature and discourse analysis; sociology of literature; media and literature; argumentation and rhetoric. The literary interview, performance and authorship, literature and media (authors and internet), decision-making, and trust.

**Dr. Hilda Nissimi**

**Dr. Claude B. Stuczynski**
Iberian inquisition, converso phenomenon, medieval and early modern Spain and Portugal, early modern first encounters between Europeans and non-Europeans.
Department of General History

Dr. Doron Avraham
Modern German history: political philosophy, nationalism, race, and minorities in 19th and 20th century Germany.

Prof. Ella Belfer
Jewish political tradition, history and literature, Russian radical thought, cultural and religious Jewish history, national identity.

Prof. Daniela Dueck
Ancient Greek and Roman traditions of geographical writing, Strabo of Amasia, fragments of lost geographical works; Ethnographic concepts in Classical antiquity; intertextuality.

Prof. Yvonne Friedman
Peace processes between Christians and Muslims during the Crusades, conciliatory gestures, diplomacy and non-verbal communication; pilgrimage and tourism-medieval and modern; medieval anti-Semitism: the Christian-Jewish polemic; women in a fighting society; ’limud’- the concept of Jewish learning in diverse Jewish communities.

Prof. Moshe Gat
British foreign policy in the 20th century, European history in the 20th century with emphasis on Britain and Italy, the great powers in the Middle East, Iraqi Jewry in the 19th and 20th centuries.

Prof. Haim Genizi
Radicalism in the 1930s in the United States; the attitude of Churches in the United States towards Jewish Holocaust survivors and displaced persons; Protestant churches in Canada and their attitude towards the Holocaust and the State of Israel; the Jewish religious national movement in Hungary during the Holocaust and its aftermath.

Prof. Myriam Greilsammer
Social and anthropological history; art history and history of the mentalities in the Low Countries during the Middle Ages and early modern times (12th-17th centuries); women’s history, gender history, history of maternity, gynecology and marriage; Low Countries history (13th-17th century), particularly the Lombards. Protestantism and Calvinism, law, and witchcraft.

Dr. Yosef Liebersohn
History of ideas, intellectual history, classical philology, ancient and Hellenistic philosophy.

Dr. Zohar Maor
Cultural and intellectual history of modern central Europe: nationalism, secularization and neo-religiosity; anti-rationalistic culture.

Department of General Philosophy

Prof. Yuval Dolev
Philosophy of Time, the A/B theories debate and a phenomenological alternative. Time in the context of the realism/antirealism debate, relativity theory, temporal directionality. Philosophy of perception.

Prof. Dov Hercenberg
Heidegger’s phenomenology and the relationship between togetherness (Füge, Zusammenhang) and tearing (Zerrissenheit); the relationship between nature, culture and art; loss and coping, separation and the process of emergence in German philosophy.

Dr. Pini Ifergan
Classical German philosophy with emphasis on German idealism, especially Hegel’s social and political philosophy. Philosophical-anthropological question: “what is Man” in the works of Hans Blumenberg. Philosophical discourse on modernity.

Dr. Tamar Levanon
Metaphysics and the problem of change, its implications, and the ontological role of the concept of transition. Leibniz’s philosophy and its contribution to the development of process metaphysics, in William James and Alfred North Whitehead.

Prof. Ronny Miron
Continental philosophy, in particular the German post-Kantian thinking: philosophical traditions of idealism, existentialism, phenomenology.

Prof. Ohad Nachtomy
Early modern philosophy and science, especially Leibniz’s metaphysics, the connection between the notions of infinity and life; philosophy of biology, phenotype/genotype relations.

Dr. Efrat Ram-Tiktin
Moral philosophy, bioethics, political philosophy: theories of justice during the 20th century.

Prof. Avi Sagi

Prof. David Widerker
Free will, moral responsibility, action theory; philosophy of mind, metaphysics, philosophy of language.
Department of General Philosophy

**Prof. Noam Zohar**
Moral and political philosophy: applied ethics, mainly bioethics and the ethics of warfare. Rabbinics: methods for exploring the relation between texts, norms, and values; philosophy of Halakhah; Jewish bioethics, Jewish political thought.

Department of Information Science

**Dr. Noa Aharony**
Information literacy, information technology acceptance among information professionals, information science education.

**Prof. Judit Bar-Ilan**
Informetrics, including bibliometrics, altmetrics and research evaluation. Information retrieval, information behavior and Internet research.

**Prof. Shifra Baruchson Arbib**
History and sociology of communication channels, reference literature and the information interview, social information science, info-ethics, history of the Hebrew printed book, information behavior.

**Dr. Ofer Bergman**
Personal information management.

**Dr. Jenny Bronstein**
Information seeking behavior, academic libraries, Web 2.0 & Library 2.0, information retrieval.

**Dr. Gila Prebor**

**Prof. Snunith Shoham**
Organizational behavior, knowledge management, knowledge organization, information needs, public libraries.

**Dr. Maayan Zhitomirsky-Geffet**
Semantic web, Information retrieval on the web and in digital libraries, ontology research, natural language processing and computational linguistics.
Department of Music

Prof. Eitan Agmon
Theory and analysis of tonal music, including the study of tonality from a communicative perspective, Schenkerian analysis, rhythm, and the music of Chopin.

Prof. Dorit Amir
Music therapy.

Prof. Ehud Bodner
Psychology of Music, Gerontology, Psychopathology. In the psychology of music I work on: (a) mood regulation through (e.g., “problem music”, music in aging), (b) motivation (e.g., music in sport) and (c) the impact of music on inter-group relations (e.g., to reduce stigmas, prejudice, and intergroup bias). In gerontology I study: (a) perceptions of aging and dying, (b) personality development, (c) positive psychology, (d) emotional complexity and emotion regulation. In psychopathology: (a) psychotherapy with borderline personality patients, (b) psychopathologies and positive psychology.

Prof. Judit Frigyesi
20th century music and literature: avant-garde, experimental forms; the music of Béla Bartók: structure, hermeneutics, socio-cultural context; East-Ashkenazi liturgical chant and para-liturgical music: structure (rhythm, modality and typology), aesthetics, history and history of research; the expression of Jewish existence in 19th and 20th century European music and literature.

Dr. Avi Gilboa
Music therapy and psychology of music with an emphasis on social and emotional aspects of music.

Dr. Yoel Greenberg
The rise of sonata form as a self-organizing system - an evolutionary model. Music of Jewish composers post WWI (Schoenberg, Schulhoff and Ben Haim).

Prof. Ethan Haimo
Music theory (theories of tonal form, atonality, and 12-tone theory). Music of the late eighteenth century (in particular, Haydn and Cimarosa); music of the early twentieth century (in particular, Schoenberg and Stravinsky). Composition (works for solo instruments, chamber groups, choir, orchestra).

Dr. Atara Isaacson
Nineteenth-century music, aesthetics of the Romantic Era, vocal genres & piano music, music education, Israeli song, alternative teaching methods, navigation in the classroom, discipline problems, teacher-student relationships, and methodology of education.

Dr. Elena (Temin) Reikher
Theory of music, the traditional and art music of Central Asia, the musical culture of the Bukharan Jews.

Dr. Marina Ritzarev
Eighteenth-century Russian music, Tchaikovsky, theory of vernacular in music.

Dr. Sara Zamir
Interdisciplinary studies of Music and Literature aesthetics.
Department of Translation and Interpreting Studies

Prof. Elda Weizman
Cross-cultural pragmatics; indirectness in the written media (op-eds. and comments),
electronic media (news interviews) and spoken discourse (face to face interaction);
irony, theme and rheme, challenge; corpus-based discourse analysis.

Prof. Rachel Weissbrod
Theory of translation; history of translation into Hebrew; literary translation; translation
for the electronic media (film, television); inter-semiotic translation/transfer/adaptation;
translation and anti-Semitism.

Dr. Hilla Karas
Theory of translation; translation of medieval texts; intralingual translation, especially inter-temporal; heterolingual texts; translation and national identity, continuity and history.

Faculty of Social Sciences

Department of Criminology
Department of Economics
Department of Geography and Environment
Department of Management
Department of Political Studies
Department of Psychology
Department of Sociology and Anthropology
Interdisciplinary Department of Social Sciences
School of Communication
Pinkhos Churgin School of Education
The Graduate School of Business Administration
The Louis and Gabi Weisfeld School of Social Work
Department of Criminology

Dr. Moshe Bensimon
Criminology, violence, psychic trauma (PTSD) and music. The impact of group music therapy on victims of terror attacks, the sociological role of collective singing during intense moments of protest, the role of trait resilience and its association to trauma, PTSD and posttraumatic growth, intimate partner violence.

Dr. Tomer Einat
Women and men’s prisons; the psychosocial impact of prison on inmates; alternatives to incarceration; penology; punitive policy.

Prof. Joseph Glicksohn
Criminological and brain research as the study of sensation seeking, the relationship between impulsivity and time perception, and electrophysiological and neuropsychological correlates of personality traits. Cognition; consciousness; EEG; impulsivity; metaphor; personality; sensation seeking; time perception.

Dr. Galit Nahari
Investigative and legal decision making; with focus on detection of deception and credibility of witnesses.

Prof. Natti Ronel
The initiator of the new “Positive Criminology” perspective in criminology, and the recent “Positive Victimology” perspective in victimology. Focuses on the recovery process of offenders and addicted individuals, with emphasis on spiritual recovery.

Dr. Sophie Walsh
Immigration and its impact on adolescents, families and relationships; adolescent health and risk behaviors with an emphasis on risk and protective factors important in preventing youth violence, substance use and low mental health. Causes of adolescent immigrant entry to delinquency and involvement in violence, substance use and crime and in resiliency/ protective factors.

Department of Economics

Prof. Eyal Baharad
Individual decision making, voting theory, social choice, foundations of microeconomics theory, rent seeking.

Dr. Ruth Ben-Yashar
Decision making.

Prof. Elise Brezis
Elites, higher education, population economics, economic development, economic growth, Israeli economy.

Prof. Joseph Deutsch
Applied econometrics, income inequality, poverty.

Prof. Gil S. Epstein
Labor economics, political economy, public economics, migration.

Prof. Arthur Fishman
Microeconomic theory, industrial organization.

Dr. Raphael Franck
Political economy, law and economics, macroeconomics.

Dr. Gabi Gayer
Decision theory, microeconomics, behavioral economics, experimental economics, political economy.

Dr. Sarit Goldner
Labor economics, econometrics, migration.

Prof. Yacov Gutman
Political economy, public economics, economic growth, microfinance, economics of conflict, social norms, endogenous preferences, evolution of cooperation.

Dr. Ziv Hellman
Game theory.

Prof. Arye Hillman
Political economy, public finance, international economics, development failure, transition from socialism.
Department of Economics

Prof. Nava Kahana
Comparative economics, applied microeconomics, migration, political economy.

Dr. Drora Karotkin
Decision making.

Prof. Daniel Levy
Macroeconomics, economic growth and income convergence, international capital mobility, political economy, applications of frequency, domain methods in economics and econometrics.

Prof. Offer Lieberman
Econometric theory, econometric practice, time series analysis.

Prof. Igal Milchtaich
Game theory, social choice, economic theory.

Prof. Shoshana Neuman
Labor economics, economics of human resources, health economics, economics of religion.

Prof. Shmuel Nitzan
Public economics, group decision making, economics and politics, social and individual choice.

Prof. Hillel Rapoport
Development economics, public economics.

Prof. Adi Schnytzer
Comparative economics, gambling, sportometrics, behavioral finance, trade with inside info.

Prof. Jacques Silber
Measurement issues in economics: measurement of income inequality and polarization, uni- and multi-dimensional poverty, health inequality, income and social mobility, equality of opportunity, segregation and discrimination in the labor market.

Department of Economics

Prof. Avi Weiss
Industrial organization, labor economics, antitrust, migration, experimental economics, law and economics.

Prof. Warren Young
History of economic thought, energy economics.

Prof. Ben-Zion Zilberfarb
Macroeconomics, Israeli economy.
Department of Geography and Environment

**Prof. Irit Amit Cohen**
Cultural geography, planning, conservation, and sustainable development of cultural heritage and cultural landscapes.

**Prof. Steve Brenner**
Physical geography, physical oceanography and meteorology with expertise in climate changes, the development and application of numerical ocean and atmospheric circulation models and coupled circulation-ecosystem ocean models.

**Dr. Nir Cohen**
Political geography, migration and diaspora studies; ethnic relations.

**Prof. Yossi Katz**
Historical Geography, study of the historical and settlement geography of the Land of Israel in the modern era; history of the land laws in the Land of Israel and the State of Israel; ethnic groups in central and western Canada; cultural processes in the design of space: military and general cemeteries and houses of worship.

**Dr. Itamar Lensky**
Geographical information systems and remote sensing. Time series analysis of satellite data for meteorological, epidemiological, forest, and agricultural studies and applications. The tools provided by GIS and RS will be crucial for studying and understanding the spatial distribution and temporal trends of land changes and development as well as for monitoring the sea surface.

**Prof. Sarah Pariente**
Geomorphology, soil-water-vegetation relationships; spatial patterns of soil properties; land degradation and desertification; effects, advantages and disadvantages of grazing on the ecopeomorphic system in arid zones.

**Prof. Michael Sofer**
Economic geography with interest in local and regional development in developed and developing countries, in transformation in the rural space, entrepreneurship in rural settlements, and in environmental issues within the built up areas.

**Dr. Orit Rotem**
Urban geography, spatial behavior; urban environment and transport; impacts of information and communications technology on personal travel; environmental policy.

**Dr. Yishai Weinstein**
Geochemistry of water and volcanology, submarine ground water discharge into Mediterranean coastal waters.

Department of Management

**Prof. Yona Amitai**

**Dr. Tal Avinadav**
Inventory control, statistical quality control, project management.

**Dr. Tatyana Chernonog**
Supply chain management, supply chain risk, applied optimization, supply chain games.

**Dr. Yuval Hadas**
Public transit, logistic distribution systems, routing, logistic information systems.

**Dr. Avi Herbon**
Modeling of inventory and supply chain systems, foundations of queuing theory, machine learning applications, stochastic optimal control.

**Prof. Konstantin Kogan**
Applied optimization, production/operations and supply chain management in general; supply chain games, production control, planning and scheduling in particular.

**Dr. Racheli Magnezi**
Health policy, chronic disease management programs, cost and control in health utilization, health economics, GIS in transportation and logistics.

**Dr. Yael Perlman**
Multi-echelon inventory models, supply chain management, production and operations management, spare parts and inspections management in unreliable systems.

**Prof. Tova Rosenbloom**
Management and organizational behavior, human resource management, traffic psychology.

**Prof. Haim Shnaiderman**
Supply chain and logistics management.
Department of Management

**Dr. Matan Shnaiderman**
Dynamic systems, ordinary and partial differential equations, Stochastic processes, stochastic process, control, applied optimization, production and inventory control.

**Prof. Uriel Spiegel**
Public and welfare economics, applied micro economics, economics of crime, economics of business, management and economics.

**Prof. Sara Westreich**
Algebra with emphasis on quantum groups, probability and game theory with an emphasis on risk indices.

Department of Political Studies

**Dr. Yehudit Auerbach**
Israeli politics, political opinion, political leadership, political psychology, conflict resolution and negotiation, foreign policy and diplomacy.

**Dr. Hemda Ben-Yehuda**
Middle Eastern politics, Conflict Resolution and Negotiation, the Democratic Peace, International Relations, Foreign Policy, The Clash of Civilizations, Civil Wars, Terrorism, Ethnic Conflict, International Political Economy.

**Dr. Avraham Bitzur**
The Israeli approach to facing the threats on its citizens. The Israeli policy towards improving the lives of veterans and the elderly.

**Prof. Asher Cohen**
Israeli politics, national identity and policy, religion and politics, political parties, elections and parliamentarianism, political sociology.

**Prof. Em. Stuart Cohen**
Jewish political thought, political sociology, military politics, national security, foreign policy.

**Prof. Em. Eliezer Don Yehiyeh**
 Israeli politics.

**Prof. Jonathan Fox**
Religion and politics, nationalism and ethnicity, ethnic conflict, religious conflict, the clash of civilizations.

**Prof. Hillel Frisch**
Middle Eastern politics, Israeli politics, political opinion, religious conflict, terrorism.

**Prof. Moshe Gat**
Modern diplomatic history, Middle Eastern politics, the cold war and great power politics, public policy.

**Dr. Anna Geifman**
American politics, Russian politics, political psychology, the cold war and great power politics, terrorism.

**Prof. Rami Ginat**
Russian politics, Middle Eastern politics, national identity and policy, political parties, political sociology, modern diplomatic history, elite politics, political opinion, political leadership, revolutionary ideology, the Cold War and great power politics, terrorism.
Department of Political Studies

Prof. Ilan Greilsammer
European politics, political thought and ideology, political parties, elections, and parliamentarianism, revolutionary ideology.

Dr. Zeev Hanin
Russian politics.

Dr. Moshe Hellinger
Israeli politics, Jewish political thought, religion and politics.

Prof. Efraim Inbar
Middle Eastern politics, Israeli politics, deterrence.

Prof. Efraim Karsh
History and politics in the Middle East, US and Russian foreign policy, foreign policy issues in the Mediterranean.

Prof. Menachem Klein
Middle Eastern politics, Israeli politics, Jewish political thought, political parties, religion and politics.

Prof. Avi Kober
Israeli politics, military politics, national security, foreign policy, low-intensity conflict.

Dr. Meirav Meshali-Ram
Southeast Asian politics, the democratic peace, international relations, civil wars, ethnic conflict.

Prof. Amikam Nachmani
European politics, Mediterranean politics, nationalism and ethnicity, civil wars.

Dr. Nahshon Perez
Contemporary political theory, historical wrongs and inter-generational reparations, pluralism, toleration and multiculturalism, religion and state, economic post-Zionism, the law of return.

Prof. Yehudit Ronen
African politics, religious conflict, civil wars, international political economy.

Dr. Elisha Roseman Stullman
Public policy and administration, civil-military relations, Israeli politics, religion and the military, the Gulf States and Israel.

Dr. Jonathan Rynhold
American politics, European politics, Far Eastern politics, national security, foreign policy, the cold war and great power politics.

Prof. Shmuel Sandler
Middle Eastern politics, Israeli politics, international relations, international political economy.

Dr. Eitan Shamir
National security, strategy and military thought, strategic culture, command and leadership, culture and organizational learning in military and public organizations.

Prof. Shlomo Shpiro
European politics, intelligence and national security, low-intensity conflict, terrorism.

Prof. Gerald Steinberg
Foreign policy, international relations, conflict resolution and negotiation, deterrence, public policy and administration.

Prof. Bernard Susser
Jewish political thought, political thought and ideology, revolutionary ideology, nationalism and ethnicity.

Dr. Yaacov Yadgar
Interpretive policy, national identity and policy, secular politics, nationalism and ethnicity.
Department of Psychology

Dr. David Anaki
Investigation of the unique mechanisms and processes that underlie the perception of various visual categories such as faces, objects, scenes and words. Issues are examined by combining electrophysiological (ERP) and behavioral techniques, and by examining healthy individuals as well as individuals with specific neuro-psychological deficits affecting various aspects of visual perception, such as agnosia, prosopagnosia.

Prof. Rachel Ben Ari
Enhancing education in heterogeneous schools, intergroup relations, psych-social aspects of conflict management, negotiation and mediation.

Dr. Ety Berant

Dr. Yair Berson
Leadership in organizations, implications of individual differences in leader and follower personality and values for employee and organizational outcomes. Association of leadership with strategic processes, such as organizational learning and change. Interactions between the role of principals and teachers’ leadership in predicting school renewal processes and student achievement outcomes.

Prof. Gil Diesendruck
Social categorization in children and adults, behavioral economics in children and adults, the development of morality, the acquisition of culture.

Prof. Miriam Faust
Investigating the neurobiological basis of language using a variety of research techniques. Examining the neurolinguistic mechanisms underlying the comprehension of metaphoric language, emphasizing hemispheric involvement in processing novel metaphors. Researhing phonological and semantic processing in native versus foreign language.

Prof. Ruth Feldman
Developmental Affective Science Lab: neurobiological basis of attachment relationships and their contribution to children's social, emotional, and neurological development. Integration of genetic, brain, neuroendocrine measures with fine-grain behavioral analysis in longitudinal developmental research from infancy to adolescence in health and psychopathology and in formulating novel intervention.

Prof. Ronny Geva

Prof. Eva Gilboa-Schechtman
Understanding and treatment of anxiety and depression. The ways non-verbal cues and ordinary social rebuffs combine to maintain social anxiety, depression, and low self-esteem. Multi-method approach by measuring phenomenological, cognitive, behavioral, and biological indices of emotional responses. Developing and testing effective treatments, and understanding the mechanisms behind their effectiveness.

Dr. Abraham Goldstein
Electromagnetic correlates (MEG/EEG) of cognitive and emotional mechanisms in normal and clinical populations.

Dr. Ilanit Gordon
Studies biomarkers of behavioral social interactions in humans. Biomarkers include functional brain imaging, hormonal activity, and genetic variation. Dr. Gordon examines the involvement of the neuro-hormone Oxytocin in human interaction and bonding and investigates how manipulation of oxytocin impacts brain function and behavior in typically and a-typically developing children.

Dr. Ilanit Hasson Ohayon
Coping with mental illness - insight, self-stigma, metacognition and psychotherapeutic interventions. Psycho-oncology- the psychological aspects of coping with cancer.

Dr. Danny Horesh
The long-term course of post-traumatic stress disorder (PTSD) and its co-morbidities; Risk and resilience factors in the face of traumatic stress; Psychopathology following combat; Psychotherapy research in the field of PTSD.

Dr. Netta Horesh-Reinman
Department of Psychology

Dr. Ronit Kark
Organizational psychology. Leadership in organizations. The role of identity, self and identification in leaders-follower influence processes. The development of leadership and leadership identity. Positive relationship as thriving. Processes that enhance creativity and the role of play. Gender dynamics and leadership. Leadership distance and closeness as effecting relationships and organizational outcomes.

Prof. Meni Koslowsky
Personnel selection, organizational behavior, the stress-strain relationship, methods of persuasion and their effectiveness, and research methodology.

Prof. Michal Lavidor
Cognitive enhancement via non-invasive brain stimulation and cognitive training.

Prof. Rachel Levy-Shiff
Children, families, illness, marriage, divorce, eating disorders, coping with stressful situations.

Prof. Tuvia Peri
The study of novel intervention of an integrative psychotherapy for patients suffering from Post-traumatic Stress Disorder – Narrative Reconstruction. MEG (Magnetoencephalography) study of impairments of brain functioning in PTSD patients. Mechanisms of change in different methods of psychotherapy. Psychoanalysis and Midrash.

Prof. Eshkol Rafaeli
Experience sampling and observational methods used for the study of personality disorders, dyadic processes, and psychotherapeutic change.

Dr. Yuri Rassovsky
Innovative methods for cognitive enhancement and rehabilitation of neurocognitive deficits in severe mental illness and neurological disorders; the effects of sports activities on the brain and on cognitive and emotional functions; the relationships among brain, cognitive, and emotional reserves and their impact on treatment and rehabilitation; and visual information processing and social cognition in schizophrenia.

Prof. Joseph Schwarzwald
Post traumatic stress disorder, intergroup relations, social power and influence.

Prof. Shmuel Shulman
In recent years young people have increasing difficulties in completing the transition to adulthood; establishing a career and a committed relationship. Within the conceptual framework of developmental psychopathology, we were able to identify normative and pathological trajectories. In addition, based on our longitudinal data we are able to point to personality and support systems that predict the distinctive outcomes.

Dr. Elana Stephan
Social Cognition, self & interpersonal relationships. Psychological consequences of using native versus second Language on results of negotiations, implementation of creative solutions, aesthetic and emotional experience. The self in the past: cognitive, emotional and motivational consequences of nostalgic recollections. The self in the future: motivation behind the predictions about future self. The role of partner representation in close relationships.

Dr. Rivka Tuval-Mashiach
Understanding responses to stress and trauma, in the individual, family, and community levels. Trauma and gender, resilience and post traumatic growth. Identity construction processes following traumatic and stressful events. A life span perspective of women's psychology, including the transition to motherhood, and exploring the maternal experience. Eating disorders.

Dr. Liad Uziel
Individual differences in social behavior. How personality traits (mainly impression management, neuroticism, self-control) affect responses and adjustment in interpersonal contexts.

Prof. Eli Vakil
Memory and memory disorders in various populations. I have access to patient populations of various etiologies, including traumatic brain injury, CVA, Parkinson's disease, as well as groups of healthy elderly individuals and school-aged children with ADHD or mental retardation. Eye tracker in our laboratory is now integrated in context as well as in skill learning studies. This tool provides us with information regarding the attention directed to stimuli presented. Sophisticated analytic programs allow us to analyze cognitive performance without utilizing verbal reports.

Dr. Noa Vilchinsky
Psycho-cardiology; attitudes toward people with disabilities; dyadic coping in illness.

Prof. Aron Weller
Research with animal models on biological mechanisms, potential therapeutic approaches, gender differences and developmental aspects of: overeating, obesity and binge-eating; and (in separate projects) depression & anxiety.
Department of Sociology and Anthropology

Dr. Galit Ailon
Ethnographic fieldworks as well as textual and discourse analyses, study of culture and power in organizations and financial markets. Exploring the social construction of identity and national culture in global work contexts, the political subtexts inherent in cross-cultural organizational realities as well as in theoretical accounts of these realities. Representations of corporate financial scandals in the popular business media, thus analyzing the social construction of corporate power and failure within a broader cultural perspective. Popular financial culture.

Prof. Orly Benjamin
Close relationships, poverty of employed women and job insecurity including its relations to marriage, precarious employment and gender, gender, sexuality and ambivalent belonging.

Dr. Tova Gamliel
Cultural performances (traditional and daily ceremonies), anthropology of theater, anthropology of emotions, intergenerational relations, internet and inter-personal relations, death and mourning ceremonies, gerontology and social identity, social and cultural anthropology.

Dr. Danny Kaplan
Sociology and anthropology of emotions and is interested in the study of nationalism through the prism of friendship. Israeli masculinity, militarism, civic associations, commemoration, media, and popular culture.

Dr. Nissim Leon
Modern Judaism, ultra-Orthodox communities, religious fundamentalism, nationalism, the emergence of collective memory, and the politics of the middle classes.

Dr. Michal Pagis
Combining social psychology (from a sociological perspective) with sociology of religion and culture; qualitative methods to investigate the social dynamics that are at the base of identities, ideologies and religious practice, searching for the micro foundations of contemporary cultural structures. Uncovering the different roles of social relations, interactions and practices in the production of post-industrial selves in a variety of arenas, from meditation centers to life coaching in organizations.

Prof. Larissa Remennick
Sociology of immigration and migrant integration in Israel and in the West; Russian-Soviet Jewry, emigration and global diaspora, women's health and new reproductive technologies

Department of Sociology and Anthropology

Dr. David Rier
Sociology of medicine and sociology of science and knowledge; communication, memories, and experiences of patients in intensive care units (ICUs); the use and meaning of “evidence” in formation of Israeli tobacco-control policy; development of a “panoramic” approach to the patient’s illness narrative; allocation of scarce medical resources (i.e., triage) in organ transplantation, ICUs, and combat medicine in Israel; blame and responsibility, as understood by patients and by medical sociologists.

Dr. Orna Sasson-Levy
Military and gender: constructing gender identities in the military; women in military service; citizenship, military and gender; gendered implications of the decline of the Israeli citizen's army; the meaning of military service in Israeli women's life stories: an intersectional perspective. Israeli ethnicities: Ashkenaziyut, inter-generational differences in ethnic perceptions, hishtaknezut (passing as non-ethnic); new social movements: gender and protest movements; feminist theory: gender segregation vs. women's exclusion, social responsibility for gender equality in Israel.

Dr. Ori Schwarz
Cultural sociology; sociology of the internet and digital culture, ethnic and class identities; sociology of value and evaluation; sociology of the senses (esp. sounds and society) and attention, sociological theory.

Dr. Baruch Shimoni
Organizational development, cross cultural management, mizrahut, philanthropy.

Prof. Ilana Friedrich Silber
Sociological theory, sociology of gift-relationships, sociology of philanthropy and nonprofit organizations, sociology of culture, sociology of religion, comparative historical sociology.

Prof. Ephraim Tabory
Social psychology, such as intergroup relations and identity, as well as the sociology of religion, including religious denominations, religious conflict, and Jewish renewal; relationship between law and society.
Interdisciplinary Department of Social Sciences

Dr. Ehud Bodner
Gerontology and psychology of music. Impact of ageism on social perceptions of elders, and in the effect of music on inter-group relations and on behavioral and emotional reactions. Cognitive aspects of psychopathology and suicide, well-being and perceptions of aging and death.

Prof. Rina Bogush
The media coverage of law (projects on the coverage of the Supreme Court, criticism of the supreme court, the coverage of judicial nominations, public relations and the courts, reporting trials of politicians), Textual analysis of legal decisions (project on formalism in legal decisions and changes over time). Gender and the law, and interpersonal communication.

Dr. Zev Kalifon
Medical anthropology, families of mental patients, public attitudes toward organ transplants in Israel and deafness. Measurement of attitudinal change using consensus analysis.

Dr. Amit Shrira
Aging, trauma, and mental health. More specifically, I study the effects of cumulative adversity on late-life mental health, by accounting for various intervening variables. The effects of massive trauma and its intergenerational transmission to adult children and grandchildren of traumatized people. Well-being and coping vis-à-vis the aging and dying processes.

School of Communication

Dr. Yehudit Auerbach
Persuasive communication psychology and communications, media and conflict.

Dr. Yaeli Bloch-Elkon
Public opinion, political communication.

Prof. Rina Bogush
Media and law, semiotics.

Prof. Eytan Gilboa
International communication, public diplomacy, American-Israeli relations: public dimension.

Dr. Aliza Laserson
Language and communication, communication literacy.

Dr. Aliza Lavie
Media and gender, media & religion, radio.

Prof. Sam Lehman-Wilzig
New media, public relations, media & religion.

Dr. Cilia Magen
Public relations, media and intelligence, communication in Israel.

Prof. Shlomo Shapira
Media & terrorism, communication in Europe.

Dr. Oren Soffer
Mass communication, communication in Israel.
Dr. Esther Adi-Japha
The formation of long term procedural memory; Procedural flexibility in typically developing individuals (monolingual and bilingual children and adults) and in developmental disorders (e.g., language impairment, Attention Deficit Hyperactivity Disorder).

Prof. Nirit Bauminger
Social-emotional development of children with autism spectrum disorders (social relationships; friendship and attachment; peer interaction; emotional understanding and expressiveness; social cognition; early markers of social capacities); Social – emotional intervention to facilitate socio-communicative skills for children with ASD - Autism Spectrum Disorders.

Prof. Erik-H. Cohen

Dr. Deborah Court
The study of school and classroom culture, religious education, challenges, methods and ethical issues in qualitative research.

Dr. Sigal Eden
Advanced technologies to enhance abilities of children with special needs. Advancement of cognitive and lingual abilities of children with special needs.

Dr. Zvia Fund
Cognitive and meta-cognitive aspects of problem-solving in computerized learning environments; communities of reflecting peers - effects and processes.

Prof. Haim Gaziel

Dr. Dina Goldberg
Discourse analysis and modern Hebrew syntax: conjunctions; grammatical criteria - tools for a meaningful syntactical analysis; academic writing; teachers' training.

Prof. Zehavit Gross

Dr. Ester Isman
Cognitive modifiability in children with special needs.
Pinkhos Churgin School of Education

Prof. Zemira R. Mevarech
Meta-cognition, mathematics education.

Prof. Baruch Offir
Process of change in education.

Prof. David Passig

Dr. David Resnick
Jewish/educational thought; media images of education.

Prof. Yisrael Rich

Prof. Shlomo Romi
Non-formal education, qualification of workers and residential schools; youth in distress, training workers and therapeutic interventions; classroom management, educational psychology, psychological assessment, custody cases and psychological characteristics of dropout and delinquent adolescents.

Dr. Elli Schachter
Theories of identity development; identity development and education; teachers and parents as agents of students’ and children’s identity formation, students’ significant teachers and educational experiences.

Dr. Chen Schechter
Organizational learning, system thinking, leadership, and qualitative research.

Prof. Rachel Schiff
Cognitive and linguistic aspect among readers with Dyslexia, and Specific Language Impairment. Investigates implicit cognitive and language processes such as: Artificial Grammar, Procedural Memory, Mental lexicon (phonological, morphological, semantic and orthographic priming), as well as explicit processes such as: phonological, morphological and syntactical awareness and executive function abilities. The interrelationship of cognitive and linguistic aspect and socio-economic status.

Prof. Adina Shamir
Cognitive and metacognitive development with new technologies using an interdisciplinary approach that combines technology, special education and early childhood education.

Dr. Orly Shapira
Leadership and management educational systems. Organizational ethics; Ethical dilemmas in educational systems, Authentic leadership. Mentoring in educational systems, Simulation-based workshops. Teachers’ withdrawal behaviors (lateness, absenteeism, and turnover), Teachers’ Organizational Citizenship Behaviors (OCB).

Dr. Ornit Spektor-Levy
Professional development and teaching strategies of science teachers; Science education in Pre-school: Professional development programs for pre-school teachers; Development of scientific literacy and scientific curiosity among pre-school children; Science teaching in the inclusive classroom; Scaffolding students with learning disabilities in science lessons; The impact of Information and Communication Technologies (ICT) in science classes; Teaching and learning science in 1 to 1 classes; (Ubiquitous Computing).

Prof. David Tzuriel

Dr. Yaacov Yablon
Youth at risk, school violence, peace education.

Prof. Hanna Yaoz
Holocaust literature and teaching methods.

Dr. Meni Yeari
Cognitive and meta-cognitive processes of reading comprehension (e.g., inferences, working memory, motivation), specific reading comprehension deficit, eye-tracking during reading, computational modeling of reading.

Dr. Michal Zion
Science education: biology education, inquiry learning and teaching, environmental and health literacy.
The Graduate School of Business Administration

**Dr. Menachem (Meni) Abudy**
Equity based compensation, corporate governance, valuation of non-marketable securities, liquidity and market microstructure.

**Prof. Gila Fruchter**
Dynamic competitive marketing strategy, service marketing and relationship marketing.

**Prof. Roy Gelbard**
Data mining & knowledge discovery. Software development.

**Dr. Sharon Horsky**
Analysis of consumer and firm behavior, integration of behavioral and economic approaches to consumer choice.

**Dr. Zvi Josman**
Organizational psychology, decision making processes, social responsibility, leadership and conflict management.

**Dr. Guy Kaplanski**
Behavioral finance, portfolio theory, capital markets, asset pricing.

**Dr. Elli Kraizberg**
Corporate finance, corporate control, corporate valuations.

**Prof. Beni Lauterbach**
Empirical research in finance, capital markets and corporate governance.

**Dr. Alon Raviv**
Financial institutions, international finance, fixed income, derivatives, quantitative finance, asset pricing.

**Prof. David Schwartz**
Knowledge management, electronic business, electronic government, intelligent systems, internet technology, agent-based architectures, computer-mediated communication.

**Dr. Dana Shefer**
Strategic management, technology and innovation strategy, industry evolution, boundaries of the firm.

**Prof. Shmuel Stashevsky**
Organizational behavior, application of new management programs, quality management, participatory programs, internet and e-commerce, business games, and measurement scales.

**Prof. Jacob Weisberg**
Intuition vs. analytical decision making, creativity and innovativeness, efficacy at work, organization exploration and exploitation, knowledge sharing, labor turnover, selection of CEOs in the U.S.A.

**Dr. Inbal Yahav**
Interface between operations research and statistical data modeling, in the context of health care applications and social networks.

**Dr. Eyal Yaniv**
Entrepreneurship, strategic management, innovation marketing, organizational attention, organizational culture.
The Louis & Gabi Weisfeld School of Social Work

Prof. Liat Ayalon
The integration of mental health in primary care, mental health services for deprived populations, ageism, foreign home care workers, depression among older adults, older adults with dementia, continuing care retirement communities.

Prof. Nehami Baum

Dr. Anat Ben-Porat
Domestic violence, implications of treating trauma victims for therapists: secondary traumatization, burnout, and growth, evaluation of shelters for women victims of violence.

Dr. Shirley Ben-Shlomo
Developmental transitions in family life, parenthood and parent-child relationships, adolescence, adolescents, media coverage of issues relating to treatment of children and youth.

Prof. Rami Benbenishty
Transition to adulthood among vulnerable youth, decision making in child welfare, out-of-home placement, school violence.

Prof. Liat Kulik
Gender differences in occupational behavior, spousal relations in dual-career families, spousal relations in late adulthood, unemployment: job search intensity and responses to it, stress and burnout at work, the impact of different livelihood patterns on spousal relations, intergenerational transmission of values, burnout in volunteering.

Dr. Drorit Levy
Community social work, supervision in social work, immigration.

Dr. Racheli Lipschitz-Elhawi
Youth at risk, psychiatric patients, emotional attitudes toward the self and others among Jewish and Arab children, psychotherapy.

Dr. Ayelet Makaros
Community social work, leadership development and empowerment of communities, policy change, legislation promotion and social activism, community and business collaboration.

Dr. Menachem Monnickendam
Social policy, comparative poverty measurement, human services administration, perceptions among poor populations and service providers, social networks and social services, characteristics of persons applying to welfare services in Israel.

Prof. Jonathan Rabinowitz
Psychiatric epidemiology, schizophrenia, psychiatric services, depression and clinical experiments.

Dr. Chaya Schwartz
Quality of life and community integration among persons with disabilities, services and intervention programs for persons with disabilities, coping with disability throughout the life cycle, disabled IDF veterans as a unique group.
The Louis & Gabi Weisfeld School of Social Work

**Prof. Varda Soskolne**
Social work in the health system, social factors in health, social-economic inequality in physical and mental health in Israel, health behavior, adaptation to illness and stress situations; personal resources, social support, and coping strategies, family caregivers of patients or elderly nursing home patients.

**Prof. Moshe Spero**
Theoretical and clinical psychoanalysis, the religious process in psychoanalysis, methods of measurement and the use of quality in object relations, interpretive inference.

**Prof. Orit Taubman Ben-Ari**
The psychology of risk taking and reckless driving, with emphasis on adolescents and young adults, positive psychology – particularly personal growth in the wake of life transitions, terror management theory: the effects of awareness of death on various areas of life, e.g., risk taking, meaning in life, interpersonal relationships, and decision making, the intergenerational relationship and transmission of coping abilities, reckless behavior, transition to parenthood.

**Dr. Tova Yedidya**
Group therapy, development of creative tools in therapy, supervision, teaching and research, the use of drawing as a research tool, couples, family and adolescent therapy.

**Dr. Miriam Zivony**
Intergenerational relationships and the elderly, residential facilities for the elderly, multigenerational families, cultural diversity and social work practice.
Faculty of Law

Prof. Michal Alberstein
Theories of law and mediation, law and film, jurisprudence, legal, medical and cultural perspective of trauma, restorative justice.

Dr. Ori Aronson
Courts and civil procedure, constitutional law and theory, institutional design, unique research technique: institutional analysis.

Dr. Adi Ayal
Antitrust (competition) policy, corporate law, law and economics, telecommunications. Unique research technique: economic modeling of legal institutions, philosophical assessment of assumptions implicit to legal policy.

Prof. Abraham Bell
Property law and theory, public international law and theory, public law.

Dr. Ittai Bar-Siman-Tov
Constitutional law, constitutional theory, legislation, the legislative process, judicial review.

Prof. Ariel L. Bendor
Constitutional law, administrative law, legal education and methodologies, comparative law.

Dr. Miriam Bitton
Intellectual property law, law & technology, law & economics of intellectual property, property.

Dr. Yitzhak Brand
The relationship between religion and law; Halakha and rationality; the development of Jewish law – from Tannaim to Amoraim.

Prof. Tsilly Dagan
Tax policy, international tax policy, international tax, globalization and tax competition.

Dr. Hadar Dancig-Rosenberg
Criminal law theory and moral philosophy, criminal justice, restorative justice, victims’ rights and therapeutic jurisprudence, constitutionalization of criminal law, archival research.

Prof. Yuval Feldman
Law and behavioral economics, legal decision making, employment law. Unique research technique: empirical legal studies experimental, field and lab-based research, dual reasoning.

Faculty of Law

Dr. Yaakov Habba
Jewish criminal law, Jewish evidence law, Jewish torts law.

Prof. David Hahn
Bankruptcy law, corporate liquidation and reorganization, individual bankruptcy-theory and policy considerations, corporate law.

Prof. Ruth Halperin-Kaddari
Family law, feminist jurisprudence, bioethics.

Prof. Nir Kedar
Legal history, comparative law, history legal theory, Israeli history.

Prof. Shalom Lerner
Commercial law (banking, commercial paper, financial transactions, secured transactions, assignment of debts) and property.

Prof. Shahar Lifshitz
Theory of contract law, theory of family law, history of western family law, human rights and Judaism.

Prof. Yair Lorberbaum
Jewish law, Jewish thought, political philosophy, philosophy of law.

Dr. Jacob Nussim
Taxation, fiscal policy, welfare policy, law and economics, regulation.

Dr. Gideon Parchomovsky
Property and intellectual property theory, tort law, contract law, internet law, corporate law and securities regulation.

Dr. Oren Perez
Environmental law, international trade and globalization, torts, legal theory and e-democracy.

Prof. Amihai Radzyner
Talmudic law, history of Jewish law research, Israeli legal history, rabbinical courts, Jewish family law.

Prof. Yair Lorberbaum
Jewish law, Jewish thought, political philosophy, philosophy of law.

Dr. Gideon Parchomovsky
Property and intellectual property theory, tort law, contract law, internet law, corporate law and securities regulation.

Dr. Oren Perez
Environmental law, international trade and globalization, torts, legal theory and e-democracy.

Prof. Amihai Radzyner
Talmudic law, history of Jewish law research, Israeli legal history, rabbinical courts, Jewish family law.

Prof. Arie Reich
International economic law, international trade law, European union law, arbitration law, in particular international commercial arbitration, public procurement law, competition law. Legal, soft economic and political, and institutional analysis.
Faculty of Law

**Prof. Gideon Sapir**
Constitutional law, with a concentration in religion-state issues and constitutional theory.

**Dr. Haim Shapira**
Jewish law, Jewish history, jurisprudence.

**Dr. Keren Shapira-Ettinger**
Mens Rea, politics and criminal law, economic analysis of criminal law, rationality in law.

**Dr. Hanoch Sheinman**
Ethics, including the normative factors and their foundations, philosophy of law and legal theory, including general jurisprudence, the philosophical foundations of the common law, and constitutional theory. Social and political philosophy.

**Dr. Benjamin Shmueli**
Tort law, domestic violence, parent-child relations, comparative law, the intersection between tort law and family law, and Jewish law.

**Prof. Yedidia Stern**
Corporate law, corporate acquisition, corporate finance, corporate governance, religion and state, Jewish law.

**Prof. Yaffa Zilbershats**
International law, constitutional law, freedom of movement, citizenship, immigration law.

**Prof. Zvi Zohar**
The sociology, anthropology and history of Jewish law and halakha, the culture and creativity of Sephardic-oriental rabbis in modern times, the history of the Jews of the Middle East in modern times.

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**Interdisciplinary Programs**

Brain Sciences
Science, Technology & Society
Conflict Management, Resolution and Negotiation
Hermeneutics & Cultural Studies
Gender Studies
Brain Sciences

**Prof. Moshe Abeles**  
Development of novel methods of analysis for MEG recordings. Using these methods got on-going analysis of inter-cortical coordination during execution of higher brain functions. Specific application of the methods regarding musical perception.

**Prof. Lior Appelbaum**  
Elucidating the molecular mechanism and neuronal networks that regulate sleep disorders and psychomotor retardation using the zebrafish model.

**Prof. Sharon Armon-Lotem**  
Language acquisition by bilingual children with typical language development and with Specific Language Impairment (SLI), studying the linguistic and cognitive phenomena which characterize these populations. Identifying indicators of SLI in English-Hebrew and Russian-Hebrew bilingual children.

**Prof. Moshe Bar**  
Predictions in the brain, the flow of information in the cortex during visual recognition and conscious perception, contextual associative processing of scene information, the cortical mechanisms mediating the formation of first impressions, and the visual elements that determine human preference. Prof. Bar’s interests encompass a wide-range of domains from episodic memory and spatial cognition, to the cognitive neuroscience of major depression.

**Dr. Michal Ben-Shachar**  
Structural and functional properties of the language and reading pathways in typically developing and clinical populations. This is achieved by integrating advanced methods for brain imaging (Diffusion Tensor Imaging, functional MRI) with cognitive measurements of language and reading skills. Specific research projects concern the neural basis of stuttering, reading processes in Hebrew and changes in brain connectivity in various clinical populations.

**Dr. Gal Chechik**  
Learning in brains and machines. Development of the theory and analysing data to learn how brains change during development and in experience dependent way, and understanding which algorithms the neural substrate implements to learn from experience. We use a range of techniques, from analyzing gene expression data of synapses, to large scale machine learning algorithms.

**Prof. Gil Diesendruck**  
Language and Cognitive Development. Cognitive and motivational factors driving the formation of social categories in infants and young children, and the attitudinal, moral, and conceptual implications of such categories.

**Brain Sciences**

**Dr. Ronny Geva**  
Brain processes that support early emerging behaviors, using long-term prospective research of atypical human models, including intra-uterine growth restriction, prematurity, neonatal brainstem electrophysiological dysfunction and white matter abnormalities. The research focuses on attention and gaze tracking along with clinical neuropsychological measures in view of their early intervention potential.

**Prof. Eva Gilboa Schechtman**  

**Dr. Avi Goldstein**  
Cognitive Psychophysiology. Use of electromagnetic recordings of brain activity (EEG, MEG) to investigate the neural underpinnings of cognitive and affective mechanisms in normal and clinical populations.

**Dr. Rafi Haddad**  
Neural Coding. Neural circuits underlying odor processing. Understanding how odors are encoded, perceived and affect behavior.

**Prof. Michal Lavidor**  

**Prof. Gal Kaminka**  
Research into artificial intelligence and robotics, in particular in all aspects of social cognition in humans and in robots.

**Prof. Alon Korngreen**  
Cellular Neuropsychology. Basic yet still unresolved questions in neuroscience: How do neurons process information? What is the neuronal code at the cellular level? How does synaptic integration affect neuronal computation? To address these questions the lab combines electrophysiology of neurons in acute brain slices with techniques in computational neuroscience.

**Prof. Michal Lavider**  

**Prof. Yoram Louzoun**  
Computational Immunology and Network Dynamics. Stochastic processes and the emergence of complex behaviors in population of simple agents. Application of mathematical research to immunology, brain research, complex network dynamics and epidemiology.
Brain Sciences

**Prof. Ely Merzbach**

**Dr. Eitan Okun**

**Prof. Eshkol Rafaeli**
Affect and Relationships. Advancing the understanding of two key components of daily life; our affect (that is, our moods and emotions, both disordered and non-disordered) and our relationships (and particularly the intimate bonds connecting committed couples). It typically uses multi-method studies (including experience-sampling, observational coding, and psychophysiological measurement) to explore these issues.

**Dr. Yuri Rassovsky**
Neurocognitive Enhancement and Rehabilitation. Understanding the mechanisms of neurocognitive enhancement and rehabilitation. Exploring various novel methods to improve cognition, such as martial arts, aerobic and anaerobic exercises, and transcranial stimulation, in both healthy and clinical populations. Relevance of these techniques for brain and cognitive reserves in protecting against cognitive deterioration and brain damage.

**Dr. Edward Stern**
Neuronal Circuitry and Neurodegenerative Disease. Studies of the effect of neurodegenerative disease pathology on the structure and function of nerve cells. By measuring the pathophysiology of the cells during the progression of the disease process, it is possible to design therapeutic approaches to ameliorate the effects of the pathology on the neuronal network, and to restore function to that seen in the healthy brain.

**Prof. Mina Teicher**

**Prof. Eli Vakil**

**Prof. Aron Weller**

**Dr. Elana Zion Golumbic**
The Human Cognition and Neural Dynamics. The neural dynamics underlying perception and selective attention in humans. Understanding the interface between bottom-up processing of sensory input and top-down control and selection processes.
Science, Technology & Society

Dr. Raz Chen-Morris
Renaissance and Baroque science, with a particular interest in Kepler’s optics and scientific perspective.

Dr. Noah Efron
History of Jews in science, and in the constitutive role of biotechnology in modern culture.

Prof. Oren Harman
History and philosophy of modern life sciences, with a focus on evolutionary theory, genetics, and brain science.

Conflict Management, Resolution and Negotiation

Prof. Michal Alberstein
Theories of law and mediation, law and film, jurisprudence, legal, medical and cultural perspective of trauma, restorative justice.

Prof. Jay Rothman
Conflict resolution, identity based conflict and cooperation, intragroup conflict and pre-negotiation, reflexivity and conflict cooperation
Hermeneutics & Cultural Studies

**Dr. Dorit Lemberger**

**Dr. Liran Razinsky**
French literature (mainly 20th century literature), comparative literature, French thought, psychoanalysis.

**Dr. Hizky Shoham**
Cultural history of Zionism and Israel and cultural theories.

**Prof. Ronny Miron**
Post-Kantian philosophy, in particular: phenomenology, German idealism, existentialism, modern hermeneutics, modern Jewish thought; philosophy of psychoanalysis.

**Dr. Aner Govrin**
Integrated perspectives from psychoanalysis and philosophy, in particular the influence of postmodernism and hermeneutics on the practice of psychotherapists.

**Prof. Avi Sagi**

Gender Studies

**Dr. Anat Herbst**
Welfare policies; Public policy; Gender aspects of the welfare state; Gender aspects of the social security system.

**Dr. Ronit Irshai**
Feminist critique and Jewish law (Halakhah); Jewish theology and Jewish bioethics; rape crimes in Jewish law; religious feminism and its theological challenges; gender essentialism in modern responsa literature.

**Dr. Danny Kaplan**
Masculinity Studies; The sociology and anthropology of emotions; National solidarity through the prism of friendship and intimacy; Israeli masculinity, militarism, civic associations, media and popular culture.

**Dr. Orna Sasson-Levy**
Website: research.biu.ac.il

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